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ABSTRACT

This instruction booklet and single-lesson assignment booklets for a secondary-postsecondary level course in commissary store management are one of a number of military-developed curriculum packages selected for adaptation to vocational instruction and curriculum development in a civilian setting. Purpose stated for the course is to provide store personnel with a broad background in the principles and functions of commissary store management. It includes information on the overall management of the commissary store and on the management of grocery department operations. It also includes procedures for the effective management of meat market and produce market operations. The problems of shoplifting and pilferage are covered, including employee and vendor pilferage and effective methods of deterring shoplifting and pilferage. Included in the four single-lesson assignment booklets are objectives, lesson assignments, lesson texts, references, and lesson exercises. An examination is included at the end of the course. (LRA)

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Military Curriculum Materials for Vocational and Technical Education

ED195777

COMMISSARY STORE MANAGEMENT
19-3

OE 027442

THE NATIONAL CENTER
FOR RESEARCH IN VOCATIONAL EDUCATION
THE OHIO STATE UNIVERSITY
1960 KENNY ROAD / COLUMBUS, OHIO 43210

MILITARY CURRICULUM MATERIALS

The military-developed curriculum materials in this course package were selected by the National Center for Research in Vocational Education Military Curriculum Project for dissemination to the six regional Curriculum Coordination Centers and other instructional materials agencies. The purpose of disseminating these courses was to make curriculum materials developed by the military more accessible to vocational educators in the civilian setting.

The course materials were acquired, evaluated by project staff and practitioners in the field, and prepared for dissemination. Materials which were specific to the military were deleted, copyrighted materials were either omitted or approval for their use was obtained. These course packages contain curriculum resource materials which can be adapted to support vocational instruction and curriculum development.

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The Ohio State University 1960 Kenny Road Columbus, Ohio 43210
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Military Curriculum Materials for Vocational and Technical Education

Information and Field Services Division

The National Center for Research in Vocational Education

Military Curriculum Materials Dissemination Is . . .

an activity to increase the accessibility of military-developed curriculum materials to vocational and technical educators.

This project, funded by the U.S. Office of Education, includes the identification and acquisition of curriculum materials in print form from the Coast Guard, Air Force, Army, Marine Corps and Navy.

Access to military curriculum materials is provided through a "Joint Memorandum of Understanding" between the U.S. Office of Education and the Department of Defense.

The acquired materials are reviewed by staff and subject matter specialists, and courses deemed applicable to vocational and technical education are selected for dissemination.

The National Center for Research in Vocational Education is the U.S. Office of Education's designated representative to acquire the materials and conduct the project activities.

Project Staff:

Wesley E. Budke, Ph.D., Director
National Center Clearinghouse

Shirley A. Chase, Ph.D.
Project Director

What Materials Are Available?

One hundred twenty courses on microfiche (thirteen in paper form) and descriptions of each have been provided to the vocational Curriculum Coordination Centers and other instructional materials agencies for dissemination.

Course materials include programmed instruction, curriculum outlines, instructor guides, student workbooks and technical manuals.

The 120 courses represent the following sixteen vocational subject areas:

- Agriculture
- Aviation
- Building & Construction Trades
- Clerical Occupations
- Communications
- Drafting
- Electronics
- Engine Mechanics
- Food Service
- Health
- Heating & Air Conditioning
- Machine Shop
- Management & Supervision
- Meteorology & Navigation
- Photography
- Public Service

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How Can These Materials Be Obtained?

Contact the Curriculum Coordination Center in your region for information on obtaining materials (e.g., availability and cost). They will respond to your request directly or refer you to an instructional materials agency closer to you.

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Rebecca S. Douglass
Director
100 North First Street
Springfield, IL 62777
217/782-0759

NORTHWEST
William Daniels
Director
Building 17
Airdustrial Park
Olympia, WA 98504
206/753-0679

MIDWEST
Robert Patton
Director
1515 West Sixth Ave.
Stillwater, OK 74704
405/377-2000

SOUTHEAST
James F. Shill, Ph.D.
Director
Mississippi State University
Drawer DX
Mississippi State, MS 39762
601/325-2510

NORTHEAST
Joseph F. Kelly, Ph.D.
Director
225 West State Street
Trenton, NJ 08625
609/292-6562

WESTERN
Lawrence F. H. Zane, Ph.D.
Director
1776 University Ave.
Honolulu, HI 96822
808/948-7834

COMMISSARY STORE MANAGEMENT
QM0387

Correspondence Course 19-3

Developed by:
United States Army

Development and Review Dates:
April 1975

Occupational Area:
Warehousing, Packing and Distribution

Print Pages:
279

Availability:
Vocational Curriculum Coordination Centers

Suggested Background:

Target Audiences:
Grades 11 - Adult

Organization of Materials:
Student single-lesson assignments booklets containing course objectives, text material, and lesson exercises.

Type of Instruction:
Individualized, self-paced

Type of Materials:	No. of Pages:	Average Completion Time:
COMMISSARY STORE MANAGEMENT:		
Lesson 1 - Commissary Store and Grocery Department Operations	104	4 hours
Lesson 2 - Commissary Store Meat Market Operations	69	3 hours
Lesson 3 - Commissary Store Produce Market Operations	53	3 hours
Lesson 4 - Deterrence of Shoplifting and Pilferage	30	2 hours
Examination	12	1 hour

Supplementary Materials Required:
None

THE NATIONAL CENTER FOR RESEARCH IN VOCATIONAL EDUCATION
OSU The Ohio State University
1960 Kenny Road
Columbus, Ohio 43210
(614) 486-3655

Course Description:

This subcourse is designed to provide commissary store personnel with a broad background in the principles and functions of commissary store management. It includes information on the overall management of the commissary store and on the management of grocery department operations. It also includes procedures for the effective management of meat market and produce market operations. The problems of shoplifting and pilferage are covered, including employee and vendor pilferage and effective methods of deterring shoplifting and pilferage. This course contains the following four lessons:

Lesson 1 -- Commissary Store and Grocery Department Operations covers commissary store operations, including authorized personnel, layout, and space allocation; merchandise selection, sales, and controls; grocery department operations, including location and layout; ordering receiving, handling and storing of grocery products; handling of frozen foods, diary items, and blind-made products.

Lesson 2 -- Commissary Store Meat Market Operations explains the meat market sales space allocation and display methods, techniques, price changes, and merchandising principles; processing and storage of variety meats; frozen boneless beef, including shrinkage, storage temperatures, and thawing procedures.

Lesson 3 -- Commissary Store Produce Market Operations contains materials on produce market operations, including ordering, storage, temperature and humidity, and prepackaging procedures for fresh fruits and vegetables; five basic commodity groups; display, handling, and merchandising techniques; and customer service versus clerk service.

Lesson 4 -- Deterrence of Shoplifting and Pilferage covers employee training and identification of shoplifters; shoplifting techniques; control measures and procedures for apprehending shoplifters; employee and vendor pilferage, including effective methods of control.

This course contains an instruction booklet and four signle-lesson assignment booklets. Included in these materials are objectives, lesson assignments, lesson texts, references, and lesson exercises. An examination is included at the end of this course. However, the answers to this examination are not available. Please note that Appendix B and C of Lesson 1 have been omitted because of military specific materials.

Commissary Store Management
QM0387

CORRESPONDENCE COURSE

TABLE OF CONTENTS

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2.	Commissary Store Meat Market Operations	113
3.	Commissary Store Produce Market Operations	182
4.	Deterrence of Shoplifting and Pilferage	236
	Examination	267

Please note that Annex B and C of lesson 1 have been omitted because of military specific materials.

INSTRUCTION BOOKLET

U.S. ARMY QUARTERMASTER SCHOOL
CORRESPONDENCE SUBCOURSE

QM0387

COMMISSARY STORE MANAGEMENT

STUDY MATERIAL:

SLAB 387A	SLAB 387C
SLAB 387B	SLAB 387D

ATTENTION

Please check the study material you received against that listed above. If any discrepancy exists, notify the Department of Army Wide Training Support of the Quartermaster School immediately.

Prepared by
United States Army Quartermaster School
Fort Lee, Virginia 23801
Supply Training Center of the Army School System

JANUARY 1972
[Reprint [C], April 1975]

Army-Fort Lee, Va. -4225-75-400-4

QM0387 Credit Hours: 13

COMMISSARY STORE MANAGEMENT

INTRODUCTION

1. SCOPE. This subcourse is designed to provide commissary store personnel with a broad background in the principles and functions of commissary store management. It includes information on the overall management of the commissary store and on the management of grocery department operations. It also includes procedures for the effective management of meat market and produce market operations. The problems of shoplifting and pilferage are covered, including employee and vendor pilferage and effective methods of deterring shoplifting and pilferage.

2. APPLICABILITY. This subcourse is of interest to all personnel involved in or anticipating involvement in commissary operations. It is of particular interest to commissary store managers and their department managers. This subcourse provides sufficient information to impart a working knowledge of commissary store management. Successfully completed, this subcourse will enable the student, when reinforced by additional training or experience, to effectively manage a commissary store or one of its departments.

3. COMPOSITION. This subcourse consists of four lessons and an examination totaling 13 hours of correspondence course instruction.

4. STUDY HINTS. The following suggestions are provided to assist the student in getting the most from this subcourse:

a. Set aside certain periods each week for studying and follow a planned schedule.

b. Go quickly through a study assignment to get a general idea of the lesson content. Then read completely through the assignment and try to understand everything in the lesson, noting especially the objectives specified for that particular lesson.

c. Read all directions before completing lesson exercises. Check the answer to each lesson exercise in your lesson exercise booklet before indicating the answer on your answer form.

d. Finally, complete the lesson exercises. Bear in mind that your answers must be based on the study assignment, not on your personal experience or information from other sources. The lessons are designed to be studied in sequence.

e. Review each lesson when its solution card is sent to you. If you have any questions regarding the lesson exercises or their solutions, use the Student Inquiry Sheet (QMFL Form 101).

f. Review all lessons before taking the examination. Check your answers before sending in your completed examination answer form.

QM0387 Credit Hours: 13

CONTENTS

		Credit Hours	Booklet
LESSON 1	Commissary Store and Grocery Department Operations	4	SLAB 387A
LESSON 2	Commissary Store Meat Market Operations	3	SLAB 387B
LESSON 3	Commissary Store Produce Market Operations	3	SLAB 387C
LESSON 4	Deterrence of Shoplifting and Pilferage	2	SLAB 387D
EXAMINATION		1	EXAM 387

8

SLAB 387A

Single-Lesson Assignment Booklet:

COMMISSARY STORE AND GROCERY DEPARTMENT OPERATIONS

This copy is a reprint which includes Change No. 1, Dated June 1973.

U.S. ARMY QUARTERMASTER SCHOOL
FORT LEE, VIRGINIA

SUPPLY TRAINING CENTER OF THE ARMY SCHOOL SYSTEM

JANUARY 1972

(Reprint (A), April 1975)

Army-Fort Lee, Va.-4429-75-650-5

9

SLAB 387A Credit Hours: 4

LESSON ASSIGNMENT

SUBJECT	Commissary Store and Grocery Department Operations.
STUDY ASSIGNMENT	Lesson Text, including Appendix B.
SCOPE	Commissary store operations, including authorized personnel, layout, and space allocation; merchandise selection, sales, and controls; grocery department operations, including location and layout; ordering, receiving, handling, and storing of grocery products; handling of frozen foods, dairy items, and blind-made products.
OBJECTIVES	As a result of successful completion of this assignment, the student will be able to--

1. Identify the classification of commissary stores based on sales volume.

2. List the authorized personnel required for commissary store operations and state their duties.

3. Point out important factors to consider in designing the layout of a commissary store and list the factors that influence traffic patterns.

4. Name the sections of a commissary store to be considered in planning a layout and explain the importance of space allocation.

5. List the responsibilities and authority of the commissary officer for merchandise selection and state the basic principles for the selection of merchandise for resale in the commissary store.

6. Describe the proper procedures for interviewing food salesmen and point out the selling techniques generally employed by salesmen.

7. Explain the purpose of the Item Selection Board and identify possible members.

8. Identify three types of subsistence items authorized for stockage in commissary stores.

9. Name the classes of individuals and organizations authorized to make purchases in the commissary store.

10. Describe the types of controls required in commissary store operations.

11. Explain the cashier and checkout operations of the commissary store.

12. Describe the procedures required when requesting approval of improvement projects.

13. Outline the funding procedures for improvement projects and list the types of projects for which nonreimbursable and surcharge funds may be expended.

14. Point out the sanitation and safety precautions required in commissary store operations.

15. Indicate the important factors which influence requirements for the grocery department.

16. State the major considerations in receiving, handling, and storing grocery products.

17. Describe the principles of grocery department merchandising.

18. Outline the requirements and procedures for handling blind-made products and identify available display equipment for these products.

19. Indicate the proper handling, storage, and display techniques for frozen foods and list important factors in determining the types and kinds of frozen foods to be stocked.

20. Select the proper location and layout for the dairy department and explain the display methods for high-demand dairy items.

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LESSON TEXT

CHAPTER 1

STORE OPERATIONS

Section I

INTRODUCTION

1. GENERAL. The commissary store receives, stores, prepares for sale, displays, and sells subsistence and certain household supplies to authorized individuals. It also makes sales to authorized organizations and activities where items are not available in the issue commissary. A commissary store may be organized as shown in figure 1. The commissary store manager, under the supervision of the commissary officer, supervises the grocery department, supervises the meat market and produce market managers, and supervises activities of the backup storage area and the cashiers. The grocery department is that part of the commissary store sales area where all authorized items, other than those sold in the meat or produce market, are displayed for sale.

2. CLASSIFICATION OF COMMISSARY STORES. The classification of a commissary store is determined by the average monthly sales subject to surcharge during the preceding 6 months. The store class is determined by the nearest $10,000 average sales, i.e., sales net of surcharge collections. For example, class 3 designates a store with sales subject to surcharge, approximating $30,000 per month. The sales intervals for commissary store classes 1 through 5 are shown in the chart below. The classes may be extended as far as necessary by using the same interval illustrated between classes.

Average Sales	Class
$ 5,000 to $14,999.99	1
15,000 to 24,999.99	2
25,000 to 34,999.99	3
35,000 to 44,999.99	4
45,000 to 54,999.99	5

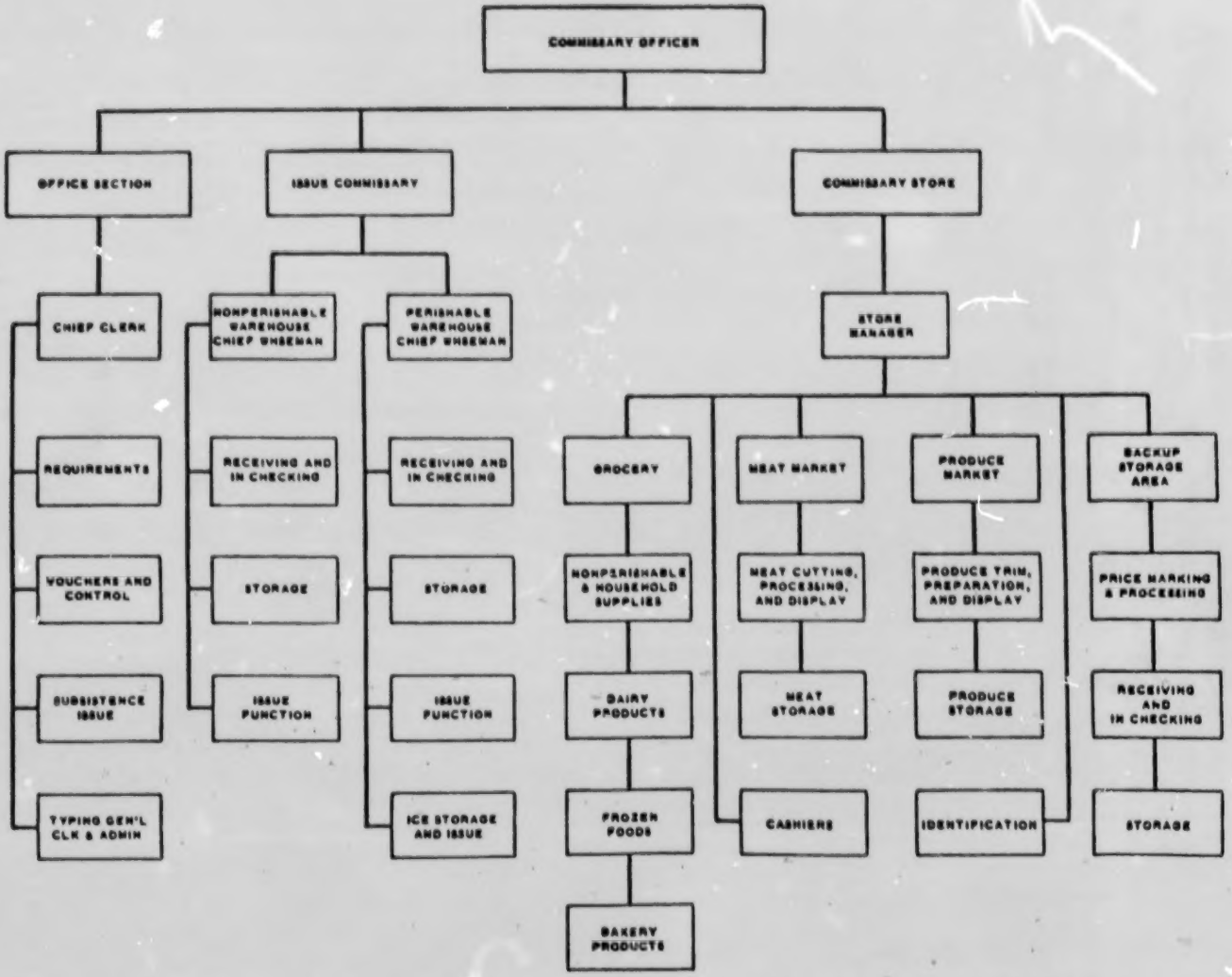


Figure 1. Typical functional arrangement for an issue commissary and a commissary store.

3. AUTHORIZED PERSONNEL. Guides for staffing commissary stores at installations and depots are contained in DA Pam's 570-551 and 616-566. Military occupational specialties (MOS's) and job titles of civilian counterparts are given in the guides. Major commanders are required to insure that civilians are used to the maximum extent possible in retail activities of commissary stores. Basic positions and primary duties of personnel required to operate a commissary store are given below. Assignments and duties may be consolidated or expanded and the number of personnel increased or decreased as dictated by work requirements.

a. Commissary officer. An officer, warrant officer, or DA civilian qualified by training and experience is appointed as commissary officer on written orders by the installation commander. The commissary officer operates the issue commissary or commissary store, or both. Under the general supervision of a designated staff officer, the commissary officer is accountable for subsistence supplies and funds. Unless prohibited by regulations, he may delegate his authority and functions to personnel assigned to the issue commissary or the commissary store; however, this does not relieve him of his responsibilities or accountability. The commissary officer and his representative or representatives must be bonded.

b. Control branch personnel. Duties of the control branch personnel are given below.

(1) Supervisor general supply specialist. The supervisor general supply specialist, under the supervision of the commissary officer, supervises and administers all personnel engaged in the requirements, accounting, recording, administrative, budgetary, reporting functions of the control branch and maintenance of the commissary store property records.

(2) Accounting technician. The accounting technician supervises and maintains the commissary's account as follows:

(a) Prepares, numbers, and posts vouchers.

(b) Maintains and balances accounts.

(c) Codes and batches all vouchers and forwards them to the finance and accounting office for entry into stock fund general ledger accounts.

(d) Maintains required abstracts.

(e) Prepares adjustment vouchers.

(f) Maintains price change records.

(g) Prepares the commissary price list, when applicable.

(h) Prepares reports.

(3) Stock control specialist. The stock control specialist--

(a) Computes the Basic Daily Food Allowance, Field Ration (BDFAF) to include the monetary allowance per 100 men per month for self-service accessory food and condiment centers.

(b) Computes the Basic Daily Food Allowance for Monetary Allowance Ration System (BDFAM), if applicable.

(c) Receives ration requests and checks consumption records and stocks for availability.

(d) Prepares field ration issue slips, troop train and motor convoy issue slips and other issues.

(e) Prepares DA Form 3915 (Order and Receipt for Direct Vendor Delivery) for items delivered direct to the organization dining facility.

(f) Maintains DA Form 3289 (Cumulative Summary of Field Rations Issued). Maintains and posts dining facility account card.

(g) Recommends menu substitutions as required.

(h) Prepares monthly schedule of field rations issued.

(4) Supply Specialist. The supply specialist--

(a) Receives the revised master menu and revises the menu recapitulation. Under ARCS receives modified ration requests from dining facility.

(b) Maintains consumption records and the requisition register.

(c) Determines requirements for both issue commissary and commissary store.

(d) Prepares requisitions and purchase instruments.

(e) Prepares reports.

(f) Coordinates requisition changes with the supporting supply source.

(g) Maintains a record of the current status of dues-in.

(h) Takes action to assure continuity of supply.

(5) Clerk-typists. The clerk-typists perform typing, filing, and similar duties usually performed by clerical personnel assigned to functional elements.

(6) Automatic Data Processing Operators. Under the 0488 system operators are necessary to operate the 0488 system in conjunction with the commissary automated accounting system principles.

c. Store personnel. The duties of store and grocery department personnel are as follows:

(1) Store manager. The commissary store manager, under the supervision of the commissary officer, acts as the general supervisor over all commissary store operations and personnel. His duties are as follows:

(a) Insures replenishment of supplies from storage in sufficient quantities to meet patron demand.

(b) Verifies the accuracy of prices.

(c) Directs training of store personnel.

(d) Insures that service to patrons is efficient and courteous.

(e) Plans and arranges display of sales items and apportions display space.

(f) Supervises the inspection, receipt, storage, and transfer of supplies from the warehouse/backup storage area to the sales area.

(g) Insures that adequate operating supplies are on hand and assists in accomplishment of inventories.

(h) Supervises commissary store annexes, when applicable.

(2) Grocery market manager. Under the supervision of the commissary officer and the store manager, the primary responsibility of the grocery market manager is to insure that ample quantities of subsistence and household supplies stocked in the grocery market are available at all times, to satisfy patron demand. The grocery market manager--

(a) Supervises the activities of all personnel engaged in pricing and displaying grocery market items for sale.

(b) Directs and plans operations of the grocery market.

(c) Arranges for replenishment of supplies from storage.

(d) Verifies the accuracy of prices.

(e) Assists in the accomplishment of inventories.

(f) Trains personnel as required.

(g) Merchandises subsistence as required.

(3) Warehouse foreman. The resale warehouse foreman, under the supervision of the commissary officer and the commissary store manager, supervises the operations and personnel within assigned warehouse and/or backup storage areas. He is responsible for--

(a) the inspection, receipt, storage, rotation, care, and protection of subsistence supplies.

(b) preparing out of stock reports.

(c) assisting in the accomplishment of inventories.

(4) Chief cashier. The chief cashier, who must be bonded under the provisions of Army regulations, may not be designated as a commissary officer's representative nor have access to the clearing keys of the cash register. Principal duties of the chief cashier are given below:

(a) Supervises the other cashiers.

(b) May operate as a relief cashier.

(c) Assists in control of the change fund.

(d) Receives cash receipts from the other cashiers.

(e) Tabulates total cash receipts for daily operations.

(f) Provides change for other cashiers.

(5) Cashiers. Cashiers must be accurate, reliable, and efficient because the patron's opinion of service rendered is greatly affected by the degree of efficiency and courtesy displayed during checkout operations. Duties of the cashiers are as follows:

(a) Receive payment for all cash purchases made in the commissary store.

(b) Operate a cash register to record sales.

(c) Verify prices as required, bag groceries, and perform other duties as assigned.

(6) Sales store workers. Sales store workers assigned to the commissary store manager to assist in the grocery department are usually wage board civilian employees whose duties include the following:

(a) Insuring that shelves are adequately stocked at all times, that shelves are clean and arranged properly by commodity groups, and that prices are prominently displayed.

(b) Verifying prices of stock as it is shelved and changing prices as necessary.

(c) Removing stock from the warehouse platform and placing it in the warehouse on shelves in the proper sequence, if regular warehousemen are not provided.

(d) Assisting in taking inventory, which includes counting stock and filling out the proper forms and records.

(e) Cleaning refrigerated display cases, display tables, and all other equipment used in the grocery market.

4. SUPERVISION AND TRAINING OF PERSONNEL. The commissary store manager supervises the selection of all grocery department personnel, and he directs their training. He may train new employees personally or delegate the responsibility to an assistant. When possible, persons to be employed in the commissary store should have some knowledge of retail food operations. Within each commissary store, standard training procedures should be established and incorporated into standing operation procedures (SOP's). The following training points should be considered:

a. Familiarization tour. A new employee should be made to feel a part of the group from the very beginning. He should be introduced to all of his fellow employees and be taken on an informal familiarization tour of the store.

b. Training plan. Before assuming full job responsibility, a new employee should be given a minimum of 2 weeks of training in commissary store operations and on-the-job training in the particular job to which he will be assigned. Training should include price-marking, shelf stocking, warehousing, cashier operations, proper customer-employee relationship, and crime prevention.

c. Training methods. Before training begins, the employee should be put at ease by the expression of confidence in his ability to perform the task. His previous experience in a similar task should be noted. The employee should be placed so that he views all demonstrations from the same angle as the instructor. A task should be demonstrated as follows:

(1) Break down and illustrate the elements of the job in a logical step-by-step sequence.

(2) Repeat the performance, emphasizing each key point.

(3) Ask leading questions to make sure that the employee completely understands the task being demonstrated.

(4) Check employee performance by having him go through the operation, and confine criticism of performance to the correction of errors made in doing any particular step.

(5) Have the employee repeat the steps until he can perform them in a satisfactory manner.

d. Trainee observation. When the new employee can do the job required of him, he should be assigned to the job and given full responsibility for performing his duties. Periodic checks should be made of employee performance and any deficiencies corrected.

Section II

COMMISSARY STORE LAYOUT AND SPACE ALLOCATION

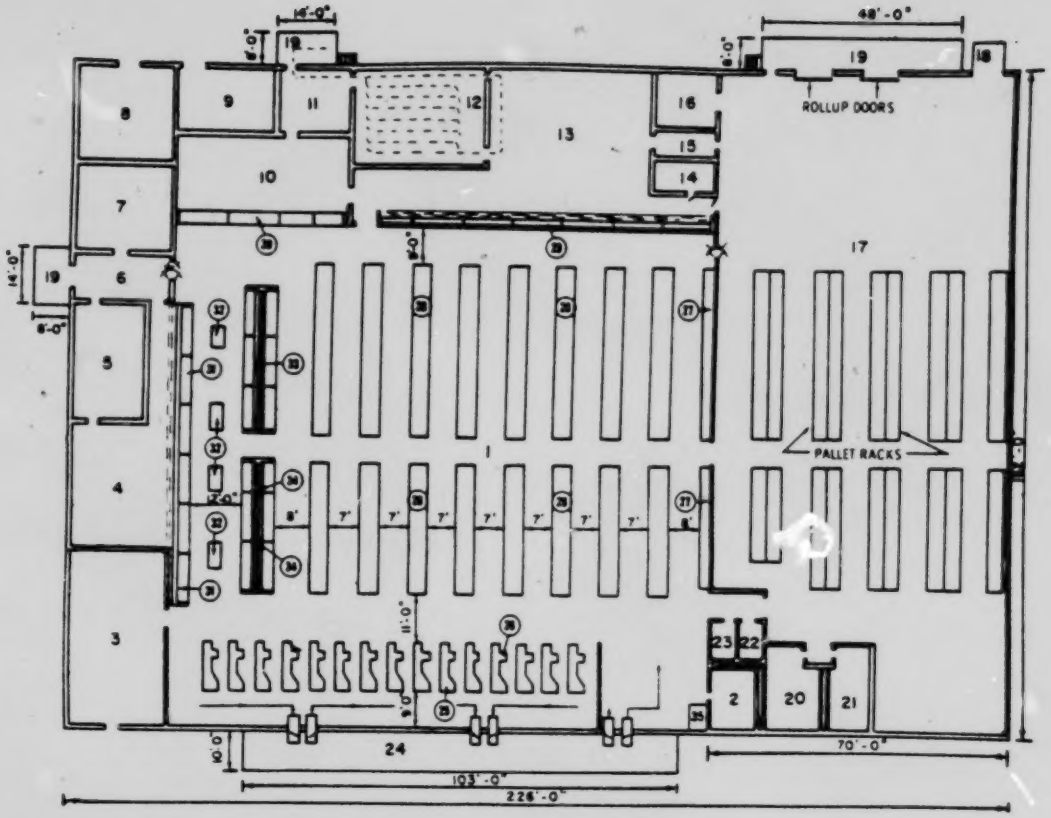
5. INTRODUCTION. A well-planned, properly administered store layout is the key to efficient commissary store operations. When a floor plan is developed, one of the most important standards to be considered is service to the patron. A well-planned store layout with sales space properly allocated according to the rate of item turnover will assist the commissary officer in meeting this standard.

6. LAYOUT AND DESIGN. Proper location of fixtures and equipment and provision of adequate aisle space are key factors in planning an efficient store layout. An effective layout cuts shopping time. In this respect, 30 minutes average shopping time is considered the standard for providing effective service to patrons. Figure 2 shows a suggested layout for a commissary store with a monthly sales volume of $400,000. Factors to be considered in planning a commissary store layout are discussed below.

a. Principles of effective layout. An effective store layout encourages customer circulation of the entire store, promotes a buying routine consistent with the housewife's thinking (one that satisfies her and impels her to come back), and makes the shopper's tour of the store pleasant and satisfying. Basic principles to be considered in planning the layout of a commissary store are as follows:

(1) Checkout counters and shopping cart areas should be located at the front or entrance to the store. Railings and turnstiles should be provided for traffic control.

(2) Aisles should be designed to facilitate the movement of patrons and permit ready access to all shelving areas, display cases, deep-freeze boxes, and other fixtures. Sufficient space should be provided in front of the meat market section, the produce section, and in front of the



1 Sales area
2 Manager and cashier's office
3 Commissary office
4 Produce preparation
5 Produce refrigerator
6 Corridor
7 Frozen-food refrigerator
8 Utility room
9 Compressor room
10 Dairy (air-curtain) refrigerato
11 Corridor
12 Meat refrigerator
13 Meat preparation
14 Meat manager's office
15 Supply storage room
16 Janitor, and cleaning gear
17 Dry storage
18 Incinerator
19 Covered platforms
20 Lockers and toilets for lady employees
21 Lockers and toilets for men employees
22 Toilet for men patrons
23 Toilet for lady patrons
24 Patrons' canopy

	Equipment	*Quantity*	*Linear feet*
25	Checkout counter	15	
26	Cash register	15	
27	Wall shelving		As required
28	Island shelving		As required
29	Mechanically refrigerated display case.		94
30	Dairy (air-curtain) display case.		70
31	Produce display case		72
32	Produce display bin	As required	
33	Frozen-food (multideck) display case.		106
34	Ice cream (multideck) display case.		42
35	Wall-type, check-writing table.		1

Figure 2. Suggested layout for a commissary store with a monthly sales volume of $400,000.

checkout counter to accommodate patrons awaiting service or waiting to be checked out.

(3) The meat market should be located in the rear of the store or the length of one side toward the rear of the store. A processing room or area should be provided behind or to one side of the meat display areas for processing meats, poultry, and seafoods.

(4) The produce section should be located in the front; USDA studies indicate that produce sales are 33% higher when located in the beginning of the traffic flow. Proper facilities should be provided in a separate room for the necessary culling, trimming, and cleaning of produce before it is placed on display.

(5) Shelving fixtures should be designed to permit easy access to any article on display. The lower tier or shelf is usually raised at least 6 inches off the floor. The height of the top shelf should not exceed 5 feet (eye level).

(6) A locked storeroom should be provided in the storeroom area for storage of broken lots and articles highly subject to pilferage.

b. Sales area. The entrance and exit should be adjacent to each other; their location, however, is generally governed by factors outside the store. Display cases and shelves should be arranged to facilitate the smooth flow of traffic throughout the store, and the checkout area should be located in the immediate vicinity of the exit.

(1) Perishable display equipment. Display equipment for perishable items should be positioned around the perimeter of the sales area or, depending upon the amount of the equipment, parallel to the rear wall and to one of the side walls. When possible, the meat market display equipment should be located along the rear wall of the store and the remainder of the refrigerated display equipment along the sides.

(2) Nonperishable display equipment. Display equipment for nonperishable items, which is made up principally of wall and island shelving, should be positioned within the center of the sales area. When shelving is on one side only, aisles should be at least 4 feet wide; when merchandise is placed on each side of an aisle, the aisle should be 7 feet wide, if possible.

c. Backup storage area. Because commissary stores have a greater requirement for storage space than commercial supermarkets, additional storage space must be provided. The storage space should be in the same building as the commissary store and should be immediately accessible, preferably adjacent to the sales area. If additional storage space is needed, warehouses in other areas may be used.

d. Meat and produce storage and preparation areas. The meat and produce storage and preparation areas should be immediately adjacent to their respective sales areas, if practical. Special technical assistance in proper layout can be furnished by the U.S. Army Troop Support Agency upon request.

7. STORE SECTIONS. Commissary stores are laid out into sections and patterned after the most modern civilian supermarkets. The major sections of commissary store are as follows:

a. Nonperishable groceries. This section of the store includes all nonperishable canned goods and staple items such as coffee, sugar, tea, flour, health and beauty aids, and cigarettes.

b. Perishable groceries. The perishable grocery section includes all perishable frozen fruits and vegetables, prepackaged frozen meats, and dairy products.

c. Meat market. The meat market processes and displays carcass and wholesale cuts of fresh meat for resale. It also displays such items as seafood, poultry, smoked meats, and luncheon meats.

d. Produce market. This section of the store prepares and displays for sale all types of fresh fruits and vegetables.

8. SALES SPACE ALLOCATION. Commissary store sales per square foot of floor space are three times those of the average supermarket. Because sales space is limited in most commissary stores, the proper allocation and effective use of space become critical factors in the overall operation of the commissary store. To determine the space allocation for each section of the commissary store, the percentage of total dollar sales for each section must be computed. Sales space may then be assigned to each section according to the percentage of total dollar sales for that section. Examples of sales space allocations within the commissary store are as follows:

a. Meat market. The meat market accounts for approximately 25 percent of the total sales volume in the commissary store; therefore, the percentage of available sales space allocated to the meat market should approximate the percentage of sales for the department.

b. Produce market. The sales volume of the produce market equals approximately 5 percent of the total sales of the store. Approximately 5 percent of the available floor space should be assigned to the produce market.

c. Grocery department. Traditionally, the grocery department has been the heart of the commissary store. It requires over 50 percent of the total selling space and accounts for almost two-thirds of the total number of items stocked in the commissary store. The grocery department is by far the largest of the major departments in the commissary store.

Section III

MERCHANDISE SELECTION

9. RESPONSIBILITIES. Item selection in the commissary store is the overall responsibility of the commissary officer and his designated representatives. The commissary officer may set up an item selection board to assist in selecting items for resale.

a. Commissary Officer. The commissary officer must consider the following factors in selecting the merchandise for resale in the commissary store. For guidance, he may use SB 10-512, which provides information on which items to stock and recommends minimum sales levels, never-out items and number of lines per product grouping.

(1) Items should be sufficiently acceptable to customers to insure turnover in a reasonable period of time.

(2) Items should provide the customer with the best buy for the price.

(3) Variety of items should meet recurring demands of customers.

(4) Quantity of items should be the minimum number necessary to meet recurring demands.

(5) Quantity of slow-moving essentials must be in keeping with average sales during a specified period to prevent loss through deterioration or overstocking and the resulting waste of critical shelf space.

(6) Selection of items should be based on the commissary consumption record.

(7) Items must be tailored to each product group and to specific items within each group.

(8) DELETED.

(9) SB 10-512 provides minimum sales for retention data per product grouping.

(10) Items should be selected from companies that are on the Army approved list for sanitation.

b. Item selection board. The purpose of the item selection board is to provide the best selection of items for the commissary store. The board is composed of people who have broad knowledge and experience in the area. Members may include the following:

(1) Commissary officer. The commissary officer should be chairman of the board, and his position should carry considerable weight in item selection.

(2) Assistant commissary officer. The assistant commissary officer has usually served under several commissary officers, and his advice and recommendations should be valuable.

(3) Store manager. The store manager works with the items every day and is in close contact with the customers. His knowledge of customer preferences is invaluable in merchandise selection.

(4) Food adviser. Because of his experience in foods and food preparation, the food adviser can contribute effective ideas and suggestions for item selection.

(5) Veterinarian. The post veterinarian can advise on Government standards, sanitation of product, and approval of supplier.

(6) Transportation officer. The transportation officer handles shipping and transportation problems.

(7) Finance officer. Financial problems involved in merchandise selection are handled by the finance officer.

(8) Supply specialist. The supply specialist keeps the consumption records for the commissary store and knows the types of items that sell best.

(9) Commissary advisory council. The commissary advisory council consists of sponsors and/or dependents from commissioned and enlisted ranks, both active duty and retired status; widows and other categories of authorized patrons. Councils will advise on the following: stockage and item selection; quality of products; hours of operation; adequacy of customer service; general degree of customer satisfaction.

10. SALESMAN INTERVIEW. The commissary officer should interview salesmen and discuss all new items, price changes, changes in distribution patterns, promotions, and deals. The salesman is a valuable source of information for the commissary officer. He can advise the commissary officer on market trends and competitors' products. Generally, an interview should not be less than 10 minutes nor more than 30 minutes. The number of accounts a salesman represents should not influence the amount of time he is allowed for presentation. Time spent interviewing a salesman should be productive; inquiries should be made concerning market conditions, production schedules, and plans of competition. However, to retain the confidence of the salesman, confidential information should not be divulged. The commissary officer should limit the number of new items to be presented by the salesman to avoid having to refuse a large number of items each visit. If only four items are presented and two are accepted, the salesman has sold half of his presentation and is usually satisfied.

a. Types of salesmen. Some salesmen will try to sell their product without regard for its quality or the sales potential in the commissary store. This type of salesman is only interested in the commission from the sale. Fortunately, most salesmen today are not this "hard-sale" type because they must have repeat sales from the commissary officer. The honest salesman attempts to sell the commissary officer only those items which he believes will sell and aid in accomplishing the retail sales mission of the commissary store. Most salesmen are honest; however, the commissary officer must be able to recognize those who are not and deal with them effectively.

b. Salesman assistance. The salesman can offer valuable assistance to the commissary officer in several areas. He can insure the prompt shipment and receipt of merchandise and make sure that the commissary officer receives any vendor's price reductions (VPR's) that correspond with

commercial specials. The salesman can also provide information on the sales potential and expected movement of an item and indicate which items should be deleted, including available replacement items. Salesmen can also provide point of purchase materials, coupons, in-store sampling and other types of merchandising.

c. Commissary officer-salesman relationship. The salesman usually wants to see the commissary officer because he wants to sell merchandise. The relationship between the commissary officer and salesmen should be kept on a business-like basis, and a social atmosphere should never be allowed to develop. Most salesmen are aware of the type of relationship that must exist between themselves and the commissary officer; however, the commissary officer must use good judgment in exercising his authority. The commissary officer may not accept special gifts such as radios, cameras, or blankets which are sometimes given when a specified number of items are purchased. Salesmen may furnish samples to the commissary officer for inspection, listing, and comparison of value and quality, or for distribution to patrons to determine customer acceptance.

11. SELECTION OF ITEMS. The commissary officer selects items for stockage that meet recurring demands of the store patrons. He must select items in sufficient demand to insure turnover of inventory. The commissary consumption record is used as a basis for developing stockage criteria. Item stockage lists must be evaluated carefully on a regularly scheduled basis, and obsolete or low-demand items should be eliminated from the list.

a. Authorization. Authorization for stockage of items is contained in SB 10-500, and SB 10-512. Commissary stores may stock specification items, brand-name items, and blind-made items.

(1) Specification items. An adequate number of specification items should be stocked to enable the commissary store to fulfill its mission of making foodstuffs available at the lowest practical price. Usually, a stock range of 124 to 150 specification line items is necessary to meet patron demand. The number of specification items a store carries is in addition to the number of line items authorized.

(2) Brand-name items. Brand-name items are authorized for stockage in perishable and non-perishable areas. All stockage should reflect the needs of the customers. Items that do not sell minimum quantities as established by SB 10-512 should be deleted from the authorized stockage list.

(3) Blind-made items. Household articles manufactured by the blind are authorized for stockage and sale in commissary stores SB 10-510. These articles are in addition to sales items authorized. Procedures for purchase, prices, and other pertinent information regarding selection and stockage of blind-made items are discussed in paragraph 47.

b. Initial selection. Newly established commissary stores have no past consumption record to use as a guide for selecting merchandise. Initial selection of items for stores in the United States, therefore, is made by the installation commander, subject to any controls established by the major commander concerned. Overseas, initial selection of items is made under criteria established by the major oversea commander. All initial selections are subject to limitations by SB 10-512. The U.S. Army Troop Support Agency assists in selecting items for newly established stores if requested to do so.

c. Restrictions. Alcoholic beverages are not authorized for stockage. Items such as, but not limited to, wine, beer, and cosmetics (except as authorized in SB 10-512) are not authorized for stockage or for purchase as exceptional articles. Stockage of items of foreign origin should be held to a minimum.

d. Exceptional articles. Exceptional articles of subsistence are defined as those subsistence articles not stocked in issue commissaries and commissary stores but which may be purchased without advertising for direct sale to specifically authorized individuals or organizations by the commissary officer. Exceptional articles may be purchased only for active duty officers and enlisted men and for officers' and enlisted men's open messes. Exceptional articles may not be purchased for civilians or organizations other than officers' and enlisted men's messes. In all instances, purchases of exceptional articles are subject to the approval of the installation commander or his designated representative. The installation commander must hold the number of such purchases to a minimum required to meet the actual needs of officers and enlisted men and of officers' and enlisted men's open messes. Exceptional articles are

sold at the actual delivered cost price plus surcharges as appropriate. These articles are inspected and accepted in the same manner as other subsistence supplies. Payment for such articles must be in cash except sales to authorized organizations which may be made on a charge basis. Exceptional articles may not be stocked in commissary stores.

Section IV

SALES AND CONTROLS

12. AUTHORIZED PURCHASERS. Commissary store privileges are extended to certain individuals, organizations, and activities. Both in the continental United States (CONUS) and overseas, purchases by individuals are made for consumption within the household of the person authorized commissary privileges. Extension of commissary privileges overseas depends on prevailing international agreements which affect the sale of duty-free items. The final authority for extending or withholding these privileges rests with the commander concerned. Two charts are reproduced as appendix B and C. The student should study these charts, which present the information on authorized patrons and their agents, along with the subparagraphs below, which outline the charts' contents.

a. Individuals. Individuals from the following classes or groups are authorized commissary privileges, subject to the exceptions on the Authorization Chart-Commissary Privileges: uniformed personnel, retired personnel, Fleet Reserve personnel, unmarried widows of personnel who were authorized commissary privileges, armed services personnel of foreign nations, American Red Cross personnel, hospitalized veterans and totally disabled veterans, civilian employees of the U.S. Government within the United States (when residing on a military installation) and outside the United States, civilian employees of the Coast Guard, retired personnel of the former Lighthouse Service, and YMCA and USO personnel.

b. Organizations and activities. The organizations and activities authorized to purchase at the commissary store are listed in appendix B.

c. Other individuals, organizations, and activities. Sales may be made to individuals other then those specified in appendix B when approval has been granted by the major

commander concerned. Requests for approval are submitted by the installation commander to the major commander concerned. The major commander is authorized to approve such requests if he determines that the individual or group is related or connected to the military establishment, if granting the privileges would be in the best interest of the United States, or if failure to grant the privileges would impair the efficient operation of military activities. If the major commander is unable to make the determination, he sends all pertinent information and his recommendations to the Deputy Chief of Staff for Logistics for final determination.

d. Authorized agents. An authorized purchaser may designate an agent or agents to make purchases on his behalf, for example, a wife may do the grocery shopping for husband and family. The sponsor (the person authorized the commissary privilege) is held responsible for the actions of his agents.

(1) Individual agents. The following persons may be designated as agents: spouse, unmarried dependent children, dependent parents, dependent brothers and sisters, dependent parents-in-law, wards, and others.

(2) Group shopping service. When military personnel are on duty at locations which are remote from a commissary store, the installation commander is authorized to approve requests for a group shopping service. This service allows one agent to purchase for a group of people who are authorized to purchase. The installation commander is responsible for establishing necessary controls to prevent the abuse of this privilege. He should require letters of authorization for the agent, a current list of the authorized purchases (giving the name, rank, and social security account number), and other controls he considers necessary.

13. TYPES OF SALES. The commissary store is authorized to make the following types of sales:

a. Individual purchases. All purchases by individuals are made for cash, check, or food coupons. Requests for such authority are submitted through command channels to the Deputy Chief of Staff for Logistics, Department of the Army, Washington, D.C.

b. Organization or activity purchases. Charge sales may be made from the backup storage area of the commissary store to authorized organizations or activities of the U.S. armed services. Such sales are accomplished through the use

of DA Form 3161 (Request for Issue or Turn-In). The form is prepared by the purchaser in four copies; it is stamped or marked "Charge Sale" and signed by the individual making the purchase. Copy No. 4 is returned to the purchaser along with the supplies. The other copies are forwarded to the office for costing and adding of surcharge, if applicable. Copy No. 2 is then forwarded to the purchaser. The commissary officer institutes controls, as necessary, to insure that all charge sales documents are promptly posted to DA Form 3290 (Issue and Charge Sales Journal).

c. Sales subject to surcharge. A surcharge is added to certain commissary store sales to provide money to reimburse appropriated funds for store expenses for which reimbursement is mandatory. The current surcharge rates are 3 percent in stores located in CONUS and Hawaii and 2 1/2 percent in stores located in Alaska and other oversea commands. The surcharge is applied to all sales to individuals and to group shopping services. Nonappropriated fund activities are assessed a surcharge on all purchases made from the commissary store, feeder area or resale warehouse stocks.

d. Sales exempt from surcharge. Sales to appropriated fund activities (fixed Army medical treatment facilities, monetary allowance ration system organizations) are exempt from surcharge. In addition, sales made from the issue commissary are exempt whether the sale is to appropriated or nonappropriated fund activities.

14. COMMISSARY CONSUMPTION RECORD. The Commissary Consumption Record (Manual) consists of DA Form 1297 (Title Insert) (Formal Accountability) and DA Form 3293 (Commissary Consumption Card). Maintenance of Commissary Consumption Records is mandatory for all specification nonperishable items, frozen items, and brand-name items, except those items procured by the blanket purchase agreement method. Commissary consumption records should be maintained in visible files. DA Form 1297 serves as a visible index and permanently exposed heading for each item. The appropriate DA Form 3293 is inserted in the card pocket above each DA Form 1297. When the consumption card is completely filled in, a new card is initiated and inserted in front of the old card. Not more than two consumption cards are maintained at one time. When a third card is needed, the oldest card is removed and destroyed. Depot-supplied nonperishable items and centrally procured perishable items should be filed by Federal supply classification (FSC)number. Records of locally purchased items should be divided into two groups, perishable and nonperishable, and filed alphabetically or by supplier.

a. DA Form 1297. The title insert for each item should include the following information:

(1) The Federal stock number (or the locally assigned stock number in some oversea commands), the item description, and the unit of issue.

(2) The requisitioning objective period entered in the "Remarks" space.

(3) Additional information such as the authority, source of supply, and unit pack entered in the appropriate spaces. Information regarding the requisition order month, the reorder point, and vendors may be entered in the "Remarks" section. (These entries should be made in pencil to permit changes.)

b. DA Form 3293. The commissary consumption card provides a running record of supply data for each item, showing when and how many supplies were ordered, received, and consumed and the balance on hand. This record provides much of the information on which computations of future requirements are based. When the vendor's notice of shipment or advice of action document indicates a major change in quantity from that on the requisition, a substitution of items, or a cancellation of an order, this information should be noted in the "On Order" column, and the substitutions cross-referenced to the item supplied. The use of the lower section of this form "Summary of Consumption and Field Ration Requirements" is optional. The review period is the period between inventories. There are spaces for entering sales and field ration consumption and field ration requirements.

15. COMMISSARY STORE CONTROLS. Installation commanders should establish necessary controls to prevent the abuse of commissary store privileges. The controls should insure that services are equally available to all patrons, that maximum use is made of all available facilities, and that admittance and privileges are limited to authorized personnel.

a. Restriction on use of purchases. Authorized commissary store patrons may neither sell nor give items purchased in the store to individuals or groups who are not

entitled to commissary privileges. They may, however, serve commissary store food to their guests. Violation of this restriction by persons who are subject to military law, may result in disciplinary action under the Uniform Code of Military Justice or in loss of commissary privileges, or both. Violation by authorized patrons who are not subject to military law may result in suspension or revocation of privileges in addition to other disciplinary measures under Civil Service or other Government regulations.

b. Identification of patrons. Patrons must be positively identified before being admitted to a commissary store. AR 31-200 contains an authorization chart that lists individuals, organizations, and activities authorized commissary privileges; it also states conditions under which oversea commanders are permitted to extend privileges to U.S. Armed Forces military personnel. The installation commander is authorized to accept the military uniform as positive identification of patrons. In overseas areas, when approved by the major commander, the military uniform may be considered adequate identification. Children accompanied by authorized patrons are admitted unless it is determined by the installation commander that exclusion of children of a certain age is beneficial to the customers. Forms used to identify authorized patrons are listed below; when necessary, major oversea commanders are authorized to establish supplementary identification procedures.

(1) DD Form 2A (Armed Forces Identification Card (Active Duty)) for all active duty military and Coast Guard personnel.

(2) PHS Form 1866-1 (Identification Card) for all active duty U.S. public health personnel.

(3) DD Form 2A (RET) (Armed Forces Identification Card (Retired)) for retired military personnel who are carried on the official retired lists and who are retired with pay.

(4) Reserve component personnel on active duty more than 72 hours but less than 30 days are identified by letter of authorization authenticated by the unit commander.

(5) DD Form 1173 (Uniformed Services Identification and Privilege Card) for other personnel with commissary privileges. Not all personnel issued DD Form 1173 are authorized commissary store privileges; therefore, care must be exercised to insure that the card authorizes the privilege.

c. Orders, deliveries and returns. Telephone orders are not accepted, and deliveries are not made by commissary stores. Patrons should inspect subsistence supplies at the time of purchase. No cash refunds are made; however, both perishable and nonperishable subsistence items may be exchanged if it is obvious that hidden defects existed at the time of purchase. Nonperishable merchandise may be exchanged if the item is still stocked and the package or container is completely intact, unopened, and in a salable condition.

d. Specification items. Specification items are items manufactured to Government specifications and listed in Federal Supply Catalog C8900-SL. No information media may be used to suggest that specification items are a "better buy" than brand-name items. Specification items sold in the commissary store may be identified in one of the following ways. If the specification item is displayed on the shelf beside similar brand-name items, the designation "Specification Item" may be displayed on the shelf molding. If specification items are displayed on a separate gondola (a display unit of shelves or bins), a sign saying "Specification Items" may be displayed above the gondola. The selection of display method should depend on relative labor costs and on convenience to customers.

e. Samples. Samples are accepted in the store solely for the purpose of determining patron demand for items concerned. The number of samples accepted may not be in excess of that necessary to determine demand, and they can be distributed to authorized patrons only. Samples received and distributed should be accounted for on a locally devised format to prevent abuse.

f. Vendor activities. Activities by vendors in relation to commissary stores are limited. There are certain things vendors may and may not do. The term "vendor shelf-stocking" means that a representative of a vendor places stock on the shelves or in the bins of the commissary store. Vendor shelf-stocking is authorized only in commissary stores located in the United States and Okinawa. Vendors in these areas may shelf-stock only items described in SB 10-512.

(1) Vendor services. Offers by vendors' representatives to provide shelf-stocking service must be voluntary. The service and the related price-marking of shelf-stocked products must be offered without contingent cost or obligation on the part of the Government.

(2) Identification. Each vendor shelf-stocker must furnish proof to the commissary officer that he is authorized by the vendor to provide shelf-stocking service. The commissary officer issues a shelf-stocking permit to each authorized shelf-stocker. The commissary officer, or his designated representative, assigns specific shelf space for vendor shelf-stocked products.

(3) Restrictions. No commissary employee, military or civilian, or member of the immediate family of a store employee may accept employment as a shelf-stocker for a vendor. In addition, restrictions are placed on vendors, and a violation of any one of the restrictions may be cause for revoking the offending vendor's shelf-stocking permit and discontinuing sale of his products in the store. Vendors and their representatives may not--

(a) Shelf-stock any product except those specifically authorized.

(b) Offer gratuities, gifts, or any items of value to commissary employees.

(c) Encroach on display space beyond that specifically assigned by the commissary officer or his designated representative.

(d) Shift or interfere in any way with competitors' products.

(e) Fail to provide service as scheduled by the commissary officer.

(f) Pilfer or present inaccurate sales documents that would cause the Government to overpay or to pay a fraudulent claim.

(g) Engage in conduct that is inappropriate for a person who is in the commissary store on official business.

(4) Vendor pricing. Vendors may not be required to preprice items to be sold in commissary stores.

(5) Samples. Government personnel are restricted from accepting favors, gratuities, gifts, or other courtesies from concerns which do business with the Government. These restrictions, however, are not interpreted as preventing commissary officers from receiving samples, provided the samples are used only to test patron demand for the item. Only the quantity actually needed to test demand may be accepted, and the samples may not be used for any other purpose. The samples may not be distributed by representatives of the vendor, nor may they be distributed to persons who are not authorized commissary privileges.

(6) Gift coupons. Vendor gift coupons found by patrons in or on items they have purchased may be redeemed at an Army commissary store. Coupons found by commissary store personnel in cases or cartons or attached to them may be used in the following ways:

(a) Cash. Coupons are redeemed monthly if they represent cash or merchandise valued at $25 or more from one concern. If their value is less than $25, they may be retained until the $25 mark is reached. Coupons which are nearing their expiration dates may be cashed in regardless of the amount. Cash and checks received for coupons are credited to the surcharge fund.

(b) Merchandise authorized for stockage. Coupons may be used to procure authorized merchandise for stockage in the store. The merchandise is tallied in on DA Form 3161 (Request for Issue or Turn-In), and the form is filed with the current accounting period records as a memorandum entry.

(c) Merchandise not authorized for stockage. Merchandise offered for coupons but not authorized for stockage may be obtained if it can be used in operating the store. If not, the coupons are turned over to the central post fund.

g. Control of misappropriation, misuse, and theft. The commissary officer is responsible for instituting internal store controls necessary to insure that Government

funds and property are safeguarded against misappropriation, misuse, and theft. All commissary store supplies are Government property until purchased and paid for. Misappropriation, misuse, or theft of Government property is punishable under the Uniform Code of Military Justice for personnel subject to military law, and under Federal Statute for others. In addition to these penalties of law, commissary privileges may be revoked.

Section V

CASHIER OPERATIONS

16. GENERAL. The quality of service extended the patron by the cashier is important to both the patron and the commissary officer. The patron's impression of the overall store service is strongly influenced by the efficiency, accuracy, and courtesy with which checkout is accomplished. If the cashier is slow and discourteous and makes many errors, the patron will be dissatisfied even though the quality of service in other sections of the store is excellent. From the commissary officer's point of view, accurate cashier operations are essential. It is this area of store operation that vitally affects his accountability. Incorrect price recording, errors in computing purchases, or poor enforcement of controls can jeopardize his entire commissary account.

17. CHECKOUT EQUIPMENT AND SUPPLIES. The equipment used for checkout is divided into two groups: mandatory equipment (equipment which must be provided) and optional equipment. An adequate stock of supplies, such as cash register tapes and paper bags, must also be provided.

a. Mandatory equipment. Commissary store equipment is paid for from surcharge funds. The equipment provided for checkout should be as modern as can be procured with available surcharge funds. Each checkout point must have the following equipment:

(1) Checkout stand. Motorized checkout stands are used when possible.

(2) Cash register. Each cash register is assigned a number. The register must be adjusted so that this number will print on the sales tape. SB 725-10 lists the transaction keys allowable on commissary store cash register.

(3) Price charts. Price charts are used to identify the prices of unmarked, fast-selling items (baby foods, canned milk, and baked goods) and price-coded items (certain name-brand soups), and for looking up surcharge amounts. Small charts may be attached to each cash register, or a large chart may be hung on the wall so that all cashiers can see it easily. Because every item sold in the store is either price-marked or listed on the price chart, the cashier does not need a copy of the commissary store pricelist.

b. Optional equipment. Procurement of optional equipment depends on the availability of funds. The following types of equipment may be procured:

(1) Signal system. A system of signaling by sound may be installed to permit cashiers to call supervisory personnel.

(2) Comfort equipment. Purchase of equipment for the comfort of cashiers is authorized. Comfort equipment may include such items as foot mats, stools, and heating or air-circulating equipment.

c. Operating supplies. There must be enough supplies on hand to allow for continuous cash register and bagging operations.

(1) Cash register supplies. A stock of register tapes for sales slips and detail tapes must be maintained at each cash register.

(2) Bagging supplies. Paper bags should be stocked in enough sizes to permit bagging without waste and in sufficient quantity to prevent slowups in bagging operations.

18. CHANGE FUNDS. To have enough cash on hand to make change in the commissary store, the commissary officer is authorized to request change funds from the finance and accounting officer. These funds are not considered part of the commissary officer's account and may be recalled when it is necessary to verify the cash in the possession of the finance and accounting officer. (Throughout this text, cashiers are referred to as males; however, commissary store cashiers may be male or female.)

a. Checking change funds in and out. Each cashier must sign for his change fund. The change fund is advanced to the cashier by completing section 1 of DA Form 3291 (Cashier's Daily Report) (fig. 3). Each change fund is identified by the number of the cash register and the letter designation of the drawer within that cash register. At the close of business, or when the cashier goes off duty, the total contents of his cash drawer, including the change fund, are turned in.

b. Establishing a standard change fund. To simplify the issue of change to cashiers, the commissary officer should establish a standard change fund. The standard change fund should include certain established amounts of precounted currency and rolled coins. The following is an example of a standard change fund:

Denomination	Number	Total Value
$5 bills	7	$35.00
$1 bills	25	25.00
Quarters	2 rolls	20.00
Dimes	2 rolls	10.00
Nickels	4 rolls	8.00
Pennies	4 rolls	2.00
	Total	$100.00

19. PROCESSING CASH SALES. All cash sales from the commissary store must be processed through a cash register. The term "cash sale" means any sale paid for in cash, by check, or other negotiable instrument, as opposed to charge account sales to organizations and activities.

a. Checking and totaling. All cashiers should use the following procedures for checking and recording sales:

(1) Record each item individually (or in groups, if the item has a group price such as 10 for $1) so that the patron will have a record of purchase by which he can identify the items.

CASHIER'S DAILY REPORT (AR 31-388)

INSTALLATION: Fort Right, Illinois

DATE: 28 April 196-

SECTION I - FUNDS ADVANCED

REGISTER NUMBER: 1

DRAWER LETTER: A

CASHIER: ☒ REGULAR ☐ RELIEF

I HAVE RECEIVED FROM THE COMMISSARY OFFICER THE FOLLOWING CHANGE FUND: $100.00

Carol Bayless (Signature of Cashier)

SECTION II - FUNDS WITHDRAWN FROM ABOVE CASHIER

TIME	IF CHECKS, LIST CHECKS	AMOUNT	SIGNATURE OF PERSON WITHDRAWING FUNDS
1200	17.10, 82, 36 12 2312, 28 31, 42 50	Four hundred fifty seven and 97/100	James Novak
1800		Four hundred and 30/100	James Novak
TOTAL FUNDS WITHDRAWN		557 17	

SECTION III - FUNDS TURNED IN

TOTAL OF CASHIER CREDIT SLIPS				NUMBER OF SLIPS		CASH COUNT TO INCLUDE CHANGE FUND	
GROCERY	MEAT MARKET	PRODUCE		SURCHARGE	TOTAL	OTHER DENOMINATIONS	52 00
5 32				16	548	$20.00	160 00
LAST REGISTER TRANSACTION NUMBERS						$10.00	80.00
DRAWER A: 254			DRAWER B:			$ 5.00	75.00
CHECKS AND MONEY ORDERS						$ 1.00	34 00
19 37	14 25					50¢	4.00
37 21						25¢	11 75
14.89						10¢	2.80
6.21						5¢	7.60
44 56						1¢	.96
14 23						SUBTOTAL	428.11
17 27						CHECKS AND MONEY ORDERS	148.30
3.06						TOTAL	676.41
22.31						SECTION IV (OFFICE USE ONLY)	

THE ABOVE IS TRUE AND CORRECT

Carol Bayless (Signature of Cashier)

VERIFIED AND ACCEPTED

James Novak (Signature of Person Receiving Funds)

LESS CHANGE FUND	100 00
SUBTOTAL	526.41
PLUS FUNDS WITHDRAWN	557.17
NET RECEIPTS	1083 58

DA FORM DEC 67 3291 REPLACES DA FORM 10-288 1 JAN 61 WHICH WILL BE USED

Figure 3. DA Form 3291 (Cashier's Daily Report).

(2) Record each item according to the section of the store from which it came. This record is made by using the appropriate section key as each item is recorded. An item from one section may not be recorded to another section. Because of this checkout recording requirement, sectional identification of each item must be simple and clear to speed up the checkout process.

(3) Segregate each item, as it is recorded, from the unchecked items on the checkout stand.

(4) Subtotal the sale after all items have been checked and recorded on the cash register.

(5) Determine the amount of surcharge by consulting the surcharge chart (fig. 4) and record the surcharge amount on the cash register as part of the sale. (This entry on the tape is identified by using the surcharge key.)

(6) Finally, total the sale by adding the subtotal of items and the surcharge.

b. Receiving payment. Payment may be received in cash, check, or by food stamps.

(1) Cash. The amount of cash received from the patron should be acknowledged by the cashier by some statement similar to "$11.92 out of $20." Bills in large denominations should not be placed in the cash drawer until the change has been given to the patron. The cash drawer should be kept closed except when the cashier is placing money in the drawer or making change. The cash drawer should be locked if the cashier must leave his register during duty hours.

(2) Checks. Checks accepted for payment must conform to the requirements and limitations given below. The finance and accounting officer advises the commissary officer about which negotiable instruments may be accepted as payment in the commissary store and may authorize the commissary officer to accept military pay and allotment checks. (The term "check" is used in this section to indicate a negotiable instrument whether it is a check, a money order, or other acceptable instrument.)

(a) Acceptable check payment. Each check must be made payable to the Treasurer of the United States. A stamp must be impressed on the back of the check (fig. 5) and the information required supplied before the cashier can

accept the check for payment. Money orders are stamped in the space marked "bank stamps." Information in addition to that included on the stamp may be required if mutually agreed on by the finance and accounting officer and the commissary officer. If checks are approved by personnel other than cashiers, the approver must clearly identify himself and the store on each check he approves.

(b) Unacceptable checks. The commissary may not accept the following checks: uncertified checks from individuals when a reasonable doubt exists that the check is collectible; predated or postdated checks; or personal checks for amounts larger than $10.00 more than the amount of the purchase, which would involve return of more than $10.00 in cash. The commissary store may not cash checks just as a convenience to patrons.

(c) Uncollectable checks. If a check is found to be uncollectable after it has been turned in to the finance and accounting officer, it is not returned to the commissary officer for cash redemption. The finance and accounting officer may request the commissary officer to help him locate the patron. If the person cannot be located, the finance and accounting officer makes the adjustment according to AR 37-103, Disbursing Operations.

c. Errors and adjustments. Errors made in recording prices or giving change and adjustments required either because of errors or because the patron has insufficient funds are processed as follows:

(1) Errors detected while checking items. If the cashier discovers during the checking process that he has recorded an item price incorrectly, he immediately points out the error to the patron. The adjustment is made by adding or subtracting the amount of the error when recording the price of the next item from the same store section. If an item is rung up to the wrong section, the correction is made when recording the next item. All adjustments should be fully explained to the patron.

(2) Errors detected after totaling. An error discovered after the sale has been recorded and totaled is adjusted by completing a DA Form 3899 (Cashier's Credit Slip). The credit slip is filled in as shown in figure 6, crediting the appropriate store section or sections, and is signed by the patron, the cashier, and the commissary officer's representative. The refund is made and the patron's cash

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CASHIER'S CREDIT SLIP FOR USE OF THIS FORM, SEE AR 31-200; THE PROPONENT AGENCY IS THE OFFICE OF THE DEPUTY CHIEF OF STAFF FOR LOGISTICS.	DATE 2 Nov 72	SALES NUMBER 164	SUBSISTENCE $ 5.32
TOTAL AMOUNT OF CREDIT *(This figure MUST BE WRITTEN)* Five ——— DOLLARS Forty-eight CENTS			MEAT $
SIGNATURE OF PATRON Mary K. Vickers			PRODUCE $
SIGNATURE OF CASHIER AND REGISTER NUMBER Doris Weller 1A			SURCHARGE $ .16
SIGNATURE OF COMMISSARY OFFICER'S REPRESENTATIVE James L. Lee			OTHER $

DA FORM 1 AUG 72 3899 REPLACES DA FORM 10-286, 1 JUL 62, WHICH WILL BE USED.

Figure 6. DA Form 3899 (Cashier's Credit Slip)

register tape is corrected. The credit slip is placed in the cashier's drawer until the end of the day. At that time, it is recorded on DA Form 3291 (fig. 3) and turned in with the contents of the cash drawer.

(3) Other adjustments and short-change claims. If the commissary officer, or his representative, cannot adjust an error satisfactorily, the following procedure is used:

(a) The officer clears the cash register as soon after the error as possible, preferably in the presence of the patron. He then counts the money in the drawer to determine the accuracy of the total recorded on the register.

(b) If the claim cannot then be settled to the satisfaction of both the commissary officer and the patron, the commissary officer submits a statement of the circumstances to the installation commander for final determination.

(4) Insufficient patron funds. If the patron discovers, after a sale has been totaled, that he does not have enough money to pay for all the items purchased, the adjustment is made on a credit slip ((2) above). The patron decides which items to leave, the credit slip is completed for the proper amount, the patron's cash register tape is corrected, and the items are returned to stock.

d. Bagging. The efficiency of the checkout process depends on cashier-bagger teamwork. There should be a bagger at each checkout stand. As the cashier records and segregates checked items, the bagger begins to put the items in bags. He must be careful to put heavy items on the bottom to prevent crushing lighter items, and items which are wet or will "sweat" should be placed so that they do not wet and weaken the outer bag. To prevent a mixup of orders, the cashier should not begin to check the next patron's groceries until the bagger has completely bagged the previous purchase.

20. RELIEF CASHIER. The relief cashier uses the B key and B cash drawer at the cash register he serves. Before reporting to relief duty, the relief cashier draws his change fund. When he reports to the register, the relief cashier makes sure that the regular cashier has locked both the A key and A cash drawer. If the register is not the type which will record separate clearance totals for clerks A and

B, the commissary officer, or his representative, must take a subtotal reading from the register before the relief cashier records any transaction. When the regular cashier returns to duty, the relief cashier removes his cash tray from B drawer and locks the drawer and the B key. If the register does not make separate A and B clearances, the commissary officer, or his representative, takes another subtotal reading. The relief cashier is responsible for his change fund and the clearance total for clerk B (or the difference between the before and after subtotal readings taken by the commissary officer).

21. WITHDRAWAL, TURN-IN, AND RECEIPT OF FUNDS FROM CASH REGISTERS. Cash register contents are turned in at the end of business or at the end of duty hours. However, funds may be withdrawn from registers during the day to prevent the accumulation of too much money in the drawer or to reduce fund counting at the end of the day. At the close of business, cash register drawers are left open after all funds have been withdrawn. Locked drawers suggest valuable contents; therefore, empty drawers are left open to prevent damage from attempted break-in.

a. Withdrawals. Withdrawals are recorded on DA Form 3291 (fig. 3). Section I of this form is completed when the cashier draws his change fund. Withdrawals are recorded and signed for in section II of the form by the person making the withdrawal. Instead of recording the amount of each check as was done for the noon withdrawal, the checks may be totaled on an adding machine and the total amount entered. The adding machine tape is then attached to DA Form 3291 and the notation "See attached listing" is made in the space for listing checks.

b. Turn-in. At the end of the business day or end of duty, each cashier counts and records the total contents of his cash drawer, including cash, checks, and credit slips. The cashier initials or otherwise identifies himself on each check he has accepted. The cashier designated to receive cash from backup-storage-area sales also turns in the DA Forms 3161 used to record these sales and any DA Form 3915 (Order and Receipt for Direct Vendor Delivery) used to document cash ice sales. The cashier enters the number of the last register transaction in section III of his DA Form 3291, records the checks (a above), enters the other information shown in figure 3, signs the form, and turns it in with the total contents of his drawer to the person designated to receive turn-ins.

c. Receipt. The person designated to receive the funds recounts the cash and verifies the listing of checks and credit slips. Any errors or discrepancies are reconciled with the cashier, and the receiver of the funds signs both the office and cashier's copies of DA Form 3291. The cashier's copy is returned to him, and he keeps it until his register has been cleared and the turned-in funds verified against the amount shown on the final clearing slip.

22. ACCOUNTING FOR FUNDS. The basic principle for control of funds is that the function of receiving and handling funds should be separated from the accounting function. The person who receives the funds must not prepare the basic accounting record. The basic accounting record of all cash sales in commissary stores is the clearing tapes from the cash registers.

a. Clearing cash registers. Cashier personnel are not authorized to clear cash registers. Only the commissary officer, his assistant, and his designated representative are authorized to clear registers. The person designated to clear the registers uses special keys for that purpose. The itemized clearing slip for each cash register (register sales slip recording the clearing transaction) is signed and annotated with the lock and unlock numbers used in clearing by the person doing the clearing. The slip is then forwarded to the person who completes DA Form 3292 (Summary of Daily Fund Receipts) (fig. 7). The detail, or audit, tape is removed from the register and filed for audit. The person doing the clearing signs and dates the new audit tape, using the date of the next sales day, and rings up a "Total" transaction to verify the changed date.

b. Preparing the summary of daily fund receipts. The person who receives the funds from the cashiers prepares DA Form 3292, which is a large envelope. The required information is entered on the front of the form, and all DA Forms 3915, 10-256, 3161, or 3291 and cash register clearing slips are placed inside the envelope. All pertinent information is entered on the form, except that the last block in the lower right-hand corner (percent of variation in surcharge collections) may be left blank if visual inspection indicates that the variation is less than 1 percent.

c. Deposit of funds. DD Form 707 (Report of Deposits) is used to deposit funds. When funds on hand (exclusive of the change fund) exceed $500, the money must be deposited at the end of the day's business or as soon

SUMMARY OF DAILY FUND RECEIPTS (AR 37-606)

INSTALLATION: Fort Right, Illinois

DATE: 28 Apr 6-

REGISTER NUMBER	UNLOCK NUMBER	LOCK NUMBER	GROCERY	MEAT	PRODUCE	SURCHARGE	CLEARING TAPE TOTAL	CASHIER: REGISTER TOTAL	CASHIER: NET RECEIPTS	CASH VARIATION: GAIN	CASH VARIATION: LOSS
a	b	c	d	e	f	g	h	i	j	k	l
1	467	468	675.38	355.01	118.34	34.45	1,183.38	1,083.38	1,083.38		
2	591	592	768.35	399.20	131.20	31.24	1,331.99	1,231.23	1,231.43	.17	
3	784	785	635.25	336.24	111.41	33.22	1,116.12	1,003.12	1,003.12		
4	121	122	586.87	308.28	102.80	29.93	1,027.98	927.98	927.75		.23
5	54	55	571.38	300.24	100.09	29.14	1,000.87	875.87	875.87		
6	879	880	440.27	241.89	80.60	23.47	806.23	731.23	731.03		.20
7	1412	1413	533.52	279.84	93.28	27.15	932.79	782.79	782.91	.12	
8	2789	2800	450.42	236.70	78.90	22.97	788.99	738.99	737.99		1.00
9	145	146	584.17	306.98	102.33	29.79	1,023.27	923.27	923.27		
					Relief	Cashier	No. 1-Total	412.37	412.37		
					Relief	Cashier	No. 2-Total	499.37	499.37		
TOTAL			5,284.81	2,782.30	920.95	281.36	9,209.62	9,209.62	9,208.48	-1.14	

SUMMARY FOR REPORT OF DEPOSITS		CASH VARIATION		SURCHARGE VERIFICATION	
TOTAL RECEIPTS	9,208.48	CUMULATIVE TO DATE	-1.36	TOTAL RECEIPTS (Code i)	9,209.62
		TODAYS VARIATION (k) *	-1.14	SALES WITHOUT SURCHARGE	231.23
VALUE OF CHECKS AND MONEY ORDERS RECEIVED	1,514.28	NET GAIN OR NET LOSS	-2.70	SALES WITH SURCHARGE	8,978.39
		* Add or subtract this amount from Grocery subtotals on Report of Deposit		SURCHARGE ON CLEARING TAPE (Code g)	261.36
NUMBER OF CHECKS AND MONEY ORDERS RECEIVED	60	SALES WITHOUT SURCHARGE		NET SURCHARGE SALES *	8,717.03
		CUMULATIVE TO DATE	45.10	SURCHARGE RATE *	.03
END OF ACCOUNTING PERIOD SALES COUNT		TODAY	231.23	REQUIRED SURCHARGE *	261.51
		CUMULATIVE INCLUDING TODAY *	276.33	AMOUNT OF VARIATION (s)	.15
PREPARED BY: Betty Cook		VERIFIED BY: Robert A Wilson		% OF VARIATION	

DA FORM 3292

REPLACES DD FORM 10-207, 1 JAN 61, WHICH WILL BE USED.

Figure 7. DA Form 3292 (Summary of Daily Fund Receipts).

thereafter as possible. Checks must be deposited no later than the close of the business day following the day on which the checks were received. When it is not possible to make a deposit and cash must remain in the commissary office overnight or over a weekend, the installation commander is responsible for providing adequate safeguards and written instructions covering procedures for safeguarding funds.

Section VI

COMMISSARY STORE IMPROVEMENT PROJECTS

23. INTRODUCTION. Commissary sales are constantly increasing; however, the commissary store space remains relatively constant. Certain improvement projects which are designed to expand sales areas, reduce customer shopping time, increase store capacity to serve additional customers, maintain sanitation, improve patron safety, or otherwise improve the convenience of the patron can be authorized. The physical structure of the commissary store is an important factor in considering improvement projects. In most cases, however, alterations and improvements can be made to expand the commissary facilities with increased sales. An important part of the management effort in the commissary store is devoted to improvements in operations and facilities. Many improvements in operations such as increasing store hours, procuring more modern and efficient equipment, and allocating space more effectively can increase the sales space of the store. Increasing the store hours reduces the number of patrons shopping per hour and gives each customer more shopping space. For effective use of available space, the operation should be open a minimum of 54 hours per week. Added convenience for family shopping and one-car families can be effected by scheduling store hours to include 15 to 20 nonduty hours per week. Additional cash registers can relieve congestion and accommodate more patrons per hour, and new multi-tier display cases can reduce the space required for display and allow more space for shopping. Changes in the physical structure of the commissary store should be considered when necessary to accomplish needed improvements.

24. AUTHORIZED IMPROVEMENT PROJECTS. Authorized improvement projects must directly support the commissary store activities and be accomplished within or immediately adjacent to the commissary store, annex, or branch. Reimbursable funding may be approved by the U.S. Army Troop Support Agency for the following projects:

a. Project development. Feasibility studies, preparation of preliminary drawings, and cost estimates required for submission to the U.S. Army Troop Support Agency There is no dollar or percentage limitation on this expenditure.

b. Architect-engineer fees (A-E), supervision and administration fees (S&A), and contingency allowance. A-E and S&E fees and contingencies based on the portion of the project cost, except cost of operating equipment, that is applicable to funded reimbursements. Compensation is limited to the following percentages:

(1) A-E fees--6 percent.

(2) S&A fees--5.8 percent (7 1/2 percent in Europe).

(3) Contingencies--15 percent.

c. Building conversion. Initial conversion of building interior for use as a commissary store.

(1) Removal, relocation, or modification of supporting columns or other interior structural obstacles.

(2) Required interior alterations (d below).

d. Building alteration. Alterations to existing sales store or processing areas which do not require modification or replacement of engineering structural features.

(1) Relocation or removal of restrooms, break rooms, and offices when such action will increase the sales area, or processing area, or will improve customer traffic flow within the store.

(2) Construction of inclosed vestibules around customer entrance and exit doors provided such construction is accomplished within existing exterior walls.

(3) Removal or relocation of interior nonbearing walls.

(4) Purchase and installation of floor tiling in the sales and processing areas, including repairs to subflooring.

(5) Construction of drop ceilings.

(6) Construction or improvements to customer restrooms.

(7) Tiling walls in processing areas.

(8) Construction of handrails to guide the flow of traffic or improve customer safety.

(9) Purchase and installation of conveyors required to move subsistence supplies from adjacent warehouse to the commissary store or to move customer's groceries from the checkout area to a pickup point.

(10) Purchase and installation of overhead meat rails, including supporting structure.

(11) Modification and extension of existing automatic fire sprinkler system when such work is performed in connection with other improvements.

(12) Purchase and installation of necessary ventilation in the meat processing area.

e. Equipment support. Alterations and modifications required to install, protect, or improve the operation of commissary store equipment.

(1) Relocation or modification of all utilities, to include increasing capacity.

(2) Installation or relocation of drains.

(3) Construction of exterior docks used as a foundation for equipment. Docks include overhead cover.

(4) Leveling and strengthening floors.

f. Temperature conditioning. Purchase and installation of air-cooling or heating equipment and insulation of ceilings and walls. Floors in refrigerated areas may also be insulated.

g. Parking lots. Surfacing and marking of parking lots used exclusively by commissary store patrons. This does not include leveling, removal of obstacles, or preparation of undersurface.

h. Exterior entrance and exit areas. Construction or modification of customer entrance and exit areas.

(1) Construction of covered entrance and exit ramps.

(2) Construction of canopies over loading docks for the protection of supplies.

i. Interior decorating. Interior decorating designed to improve the appearance or lighting in the sales or processing areas.

(1) Painting.

(2) Plastering.

(3) Purchase and installation of wall display letters.

j. Lighting. Purchase and installation of lighting fixtures and modification, replacement, or extension of electrical wiring.

25. FUNDS. Construction, alterations, or modifications of commissary stores should be accomplished with appropriated funds (Military Construction, Army, or nonreimbursable Operation and Maintenance, Army). All proposed projects for alterations, modifications, and improvements are submitted through command channels to the U.S. Army Troop Support Agency for technical review and approval. A combination of appropriated nonreimbursable funds and appropriated funds to be reimbursed from surcharge funds may be used for improvement projects. If a combination of funds is used, the nonreimbursable portion must be used according to Army regulations. The dollar amount of reimbursable funds is not limited when used separately or when used in combination with nonreimbursable funds.

26. SUBMISSION OF REQUESTS. Requests for proposed projects submitted to the U.S. Army Troop Support Agency must contain sufficient detailed information for proper evaluation. Statements regarding the projects must define current problem areas and objectives to be obtained. When surcharge funds are to be used, the request must state that appropriated funds could not be obtained and that approval of the project and use of surcharge funds are urgent. The request must also state whether current Trust Revolving Fund Account program objectives of the command can or cannot finance the surcharge

portions of the project and also meet the mandatory costs of the command for the fiscal year. Further, project requests must state whether additional personnel are required and if so, whether personnel resources are available within the command to meet the requirement. When a request for improvements is submitted to the U.S. Army Troop Support Agency documentation outlined below must accompany the request.

a. Plan of the existing building, drawn to scale, including utility, sewer, mechanical, structural, and elevation details.

b. Site plan of the installation, drawn to scale, identifying the commissary store; annexes; separate storage, if applicable; parking areas for patrons; access roads; loading docks for trucks; rail sidings; and other pertinent features.

c. Floor plan of existing building, drawn to scale, indicating the location of all present equipment. Walk-in refrigerators are identified as built-in or prefabricated, and interior walls and partitions are identified as bearing or nonbearing.

d. A list of all serviceable equipment on hand. Each item of equipment is identified as to make and model and is keyed to the floor plan of the existing store.

e. A floor plan of the proposed store layout, drawn to scale. The plan should indicate where equipment is to be placed, and existing equipment to be used should be identified separately from new equipment required.

f. A list of equipment on order and new equipment required, with each item keyed to the floor plan of the proposed store layout.

g. Photographs, if appropriate.

h. Cost estimates.

i. Identification of any detail or feature of the building that would limit flow of traffic or limit placement of equipment.

Section VII

SANITATION AND SAFETY

27. RESPONSIBILITIES. Commanders are responsible for the sanitary control of all foods and beverages served or dispensed on military installations. Foods and beverages are sold only through issue commissaries, commissary stores, exchanges, clubs, dispensers, or other specifically authorized outlets. The Army Medical Service establishes standards of sanitation for all food sources and makes inspections to insure that sanitary practices are observed. The service also recommends sanitary standards for the design, constructions, and operation of facilities and equipment where food for military use is stored, prepared, cooked, served, or dispensed. Veterinary personnel, when available, conduct the inspections. The commissary officer, under the supervision of a designated staff officer, is responsible for maintaining the following sanitary standards:

a. Cleanliness must be observed at all times in the store and storage areas.

(1) Floors should be kept clean and free of all debris.

(2) Waste receptacles should be emptied and cleaned and trash removed from the store area as often as necessary.

(3) Checkout counters should be cleaned daily and kept free of all extraneous material.

(4) Shopping carts should be kept clean and in good working condition at all times.

(5) All railings and turnstiles should be dusted daily and painted at regular intervals.

(6) Toilet and washroom facilities should be provided for store employees and when possible, for patron use. Soap, hot water, and individual towels should be available in the washrooms.

b. Watertight garbage cans with tightfitting lids should be kept outside on racks that can be cleaned easily. Contents of the cans should not be permitted to accumulate

above a level of 4 inches from the top. The cans should be kept clean at all times, but personnel who handle food should not be used to clean them.

c. Combustible trash may be burned if approved incinerators or burning pits are provided. Noncombustible trash or garbage may be disposed of by burial in a sanitary fill or by contract if permitted by local health department regulations. Refuse trucks equipped with multiple containers as defined in TM 5-634 may be used, provided the quantity of material collected justifies purchase of such equipment.

d. A continuous program for prevention and elimination of insects and rodents should be carried out. TM 5-632 and AR 420-76 may be used as guides for controlling roaches, flies, rodents, and other pests.

e. The interior of refrigerators should be kept clean and free of objectionable odors; they should be designed for easy cleaning with all shelves removable. Refrigerators used for holding chilled items should be operated at temperatures between 32° and 45° F.; however, refrigerators used for the storage of certain fresh fruits and vegetables may be operated at temperatures above 45° F. Frozen foods and ice cream should be stored at temperatures of 0° F. or lower. Thermometers that can be read easily should be conveniently located in each box. Boxes with drains should not be connected directly to sewers or waste lines. The use of metal covers or kraft or waxed paper on food containers placed in refrigerators is encouraged to prevent contamination and excessive drying of food.

f. Equipment and utensils that come in contact with food should be designed for easy and thorough cleaning and should be kept in good repair. These items, except those used for storing dry foods, may not be made of or plated with materials that contain cadmium, lead, zinc, or other toxic material. Containers used for storing dry foods may be made of galvanized metal joined by solder. Acid foods should not be used in zinc-galvanized containers. All plastic equipment and utensils should be of material that is not affected by high water temperatures, detergents, chlorine, and soaps.

g. Commissary personnel, as determined by the commissary officer and surgeon, must receive a medical examination before they are assigned to duty and before they resume duty if they have been away from work for a continuous

period of 30 days or more. The purpose of the examination is to exclude those who have a communicable disease or a condition that may become infectious during employment.

28. SAFETY PRECAUTIONS. The commissary officer is responsible for insuring that safety precautions presented below are carefully observed by commissary personnel.

a. Small children and infants should not be allowed to ride in shopping carts unless the carts are provided with seats for children.

b. Heavy objects should be lifted by mechanical means when possible. If heavy objects must be lifted by hand from the floor, the back should be kept as nearly vertical as possible.

c. All stacked material must be arranged in an orderly manner for convenient and safe handling.

d. Appropriate tools should be used for each job; for example, nailpullers should be used for opening boxes, strap or wirecutters for cutting metal strapping or wire, and hammers for driving nails.

e. Safety precautions presented in AR 31-200 regarding the use of power machines and handtools must be observed by personnel who prepare meat and produce items for sale.

f. Employees should be permitted to smoke in designated areas only. Ashtrays or tins filled with sand should be provided in the smoking areas.

g. All electric motors should be kept clean of oil and grease.

h. Combustibles should be kept away from sources of heat such as chimneys, refrigeration compressors, oil burners, and furnaces.

i. All rubbish should be removed from the store each day before closing.

j. Oily rags and cleaning compounds should be kept in metal containers with lids.

k. Trash that is burned must be burned in authorized incinerators under careful observation.

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l. The air vents of refrigeration equipment should never be blocked.

m. Fuse box doors should always be kept closed and the area in front of them cleared.

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CHAPTER 2

GROCERY DEPARTMENT OPERATIONS

Section I

REQUIREMENTS

29. GENERAL. Requirements for grocery department supplies are generally based on past sales records. Consideration should also be given to changes in the number of patrons served, the increase in sales during certain seasons and holidays, and the effect of sales trends. Accurate and detailed supply transaction data must be maintained to manage supplies effectively. The Commissary Consumption Record (para 14) has been established for this purpose.

30. COMPUTING REQUIREMENTS. Supply requirements are computed by comparing the total quantity required for sales for the requisitioning objective period with the total quantity on hand or on order, or both. If the quantity on hand is less than the quantity required, the difference between the two is the requirement; if the quantity on hand is greater than the quantity required, the difference is the excess.

a. Frequency. Requirements are computed as frequently as supplies are ordered. For example, if requisitions are submitted bimonthly for depot-furnished nonperishable subsistence supplies, requirements are computed bimonthly.

b. Method. The commissary store manager determines requirements for items procured on a charge account basis. Requirements for other items are determined by using consumption records; these requirements should be determined by the supply specialist and the store manager. Close coordination between the supply specialist and the store manager is important. The supply specialist should meet with the store manager frequently to learn the item consumption rate during computing periods. Some factors that should be considered in computing requirements are as follows:

(1) Number of commissary store patrons.

(2) Effect of seasons and holidays on sales.

(3) Number of brand names or container sizes, or both.

(4) Effects of advertisement of brand-name items.

(5) Differences in prices of brand-name items.

(6) Changes in strength and requirements of organizations and activities.

31. REQUISITIONING SUPPLIES. Usually, the commissary store manager forwards the requirements for the grocery department to the supply specialist. The supply specialist then consolidates these requirements with the meat market, produce market, and troop issue requirements, when applicable, and submits the completed requisition to the commissary officer for procurement.

a. Depot or centrally procured supplies. In CONUS, the Defense Personnel Support Center (DPSC) provides each commissary store with detailed requisitioning procedures. Overseas (including Alaska and Hawaii), major commanders provide the requisitioning procedures for commissary stores within their commands.

b. Locally purchased items. Most items procured for resale are considered locally purchased items. Many local purchases are made under DPSC-negotiated, brand-name contracts or blanket-purchase agreements. Purchases of these types, however, are local only in the sense that orders against these contracts do not pass through DPSC but go direct from the ordering officer to the vendor. The installation contracting officer may procure commissary supplies authorized for local purchase. The commissary officer may be authorized as an ordering officer for placing delivery orders against brand-name contracts and DPSC-requirements contracts and may be authorized to place calls against blanket-purchase agreements established by the installation contracting officer.

Section II

RECEIVING AND STORING SUPPLIES

32. RECEIVING AREAS AND PERSONNEL. Supplies may be received at the issue commissary, where applicable, or at the commissary store. The commissary officer designates the receiving areas for the various supplies. Generally,

supplies intended for the commissary store are received at one of the store receiving areas; warehouse/backup storage area, meat market, or produce market. Items listed on a single document but intended for stockage in both the issue commissary and commissary stores are received and accounted for in the issue commissary; they are later transferred to the commissary store. The commissary store manager is responsible for supervising the receipt, storage, and transfer of commissary store supplies. He may assign certain store employees to receive and check incoming supplies. If the meat market or produce market, or both, are designated as the receiving point or points, the checker of incoming supplies is assigned from the warehouse/backup storage area.

33. RECORDING RECEIPTS. Receipts of supplies are recorded and controlled as follows:

a. Voucher receipts. When a shipment arrives, other than a shipment procured by the charge account method, receiving personnel obtain a voucher number from the accounts section. The number is entered on the receiving document and all related papers. At the same time, the accounts clerk enters the date, voucher number, shipper's designation, and purchase order or shipping document number on DA Form 3295 (Voucher Register and General Control). When copies of DD Form 1348-1 (DOD Single Line Item Release/Receipt Document) accompany a shipment, the forms are grouped by shipment and considered one document. At the end of the day, the accounts clerk verifies receipt of all vouchered documents into the accounts section to make sure that no vouchers are lost or misplaced. If it is impractical for receiving personnel to contact the accounts section for a voucher number when a shipment arrives, receiving personnel use DA Form 272 (Register of Vouchers to Stock Record Account) to register all documents used to receive subsistence supplies, except items received by the charge account method.

b. Charge receipts. Charge account receipts are recorded on a locally devised tally register. A series of tally numbers is established and used for each supplier. The first tally during an accounting period is assigned tally number 1, and succeeding deliveries are numbered consecutively through the last shipment received during the period. The supplier's delivery ticket serves as the tally document. The accounts clerk verifies the receipt of all charge account tallies into the accounts section at the end of each day to insure that documents are not lost or misplaced.

34. RECEIPT OF DPSC-FURNISHED SUPPLIES. The depot or storage location furnishes the commissary officer advance copies of DD Form 1348-1 to be used for due-in information, financial inventory accounting, and advance planning for receipt and storage of supplies. A copy of DD Form 1348-1 also accompanies the shipment; this copy is used for tallying in and accounting for the supplies. DPSC Form 2005 (Invoice/ Shipping Document) is generally used to document DPSC-furnished perishable items received from Government-owned or commercial cold storage facilities.

35. RECEIPT OF SUPPLIES FROM VENDORS ON CONTRACT WITH DPSC. When perishable or nonperishable supplies are received direct from a vendor on contract with DPSC, the shipments are documented as indicated below.

a. Receiving documents. DPSC Form 300 (Order for Subsistence) is used to document shipments from vendors on contract with DPSC. Ten copies of the form are forwarded to the installation by Subsistence Regional Headquarters, DPSC, before the supplies are shipped. DPSC Form 300 is a combination purchase or delivery order and a receiving report. It provides information concerning the vendor, item, quantity, delivery date, inspection, and acceptance. One copy of the form is furnished to the installation veterinarian as a request for veterinary inspection. When the supplies are received, they are inspected and accepted in accordance with information on DPSC Form 300. When receipt conforms to all terms of the order, the inspector and commissary officer sign DPSC Form 300-2 (Receiving Report of Order for Subsistence); this form is the reverse side of DPSC Form 300. One copy of the form is used as a voucher for the commissary officer's account, and one copy is for the installation finance and accounting officer. Also, one copy is forwarded to the transportation officer and six, two of which must be signed, are forwarded to the concerned Subsistence Regional Headquarters, DPSC. The report must be completed within 2 days after the supplies are received. When shipping documents other than these are used by the supplying agency, the documents are completed and distributed in accordance with the directive prescribing use of the form.

b. Temporary voucher. When no action document is received before a shipment arrives, the commissary officer must determine whether the shipment was intended for the installation. If he learns that the shipment was intended for the installation, he must notify the applicable contracting officer or the consignor immediately that no action documents

were received. The commissary officer should also obtain the DPSC purchase order number and in the case of nonlisted items obtain the procurement cost price. The commissary officer should prepare DD Form 250 (Material Inspection and Receiving Report) and assume accountability for the items received. He should forward copies of DD Form 250 to the finance and accounting officer. Upon receipt of the action document only one copy is attached to the commissary accounting copy of DD Form 250. All other copies of the action document are destroyed.

36. RECEIPT OF LOCALLY PURCHASED SUPPLIES. When supplies are purchased locally, a delivery period should be established before a contract is awarded.

a. Establishing delivery period. The commissary officer should coordinate with the installation contracting officer and transportation officer and establish the delivery period based on the following factors:

(1) When items are required.

(2) Availability of storage space.

(3) Availability of personnel (because of peak sales days, other deliveries, and similar considerations).

(4) Quantity involved, such as car or truck lots, or less.

(5) Method of transportation available between vendor and installation.

(6) Delivery periods specified in brand-name contracts.

b. Documentation. After a delivery period has been established, the installation contracting officer forwards sufficient copies of purchase instruments to the commissary officer. If appropriate, the purchase instruments are used as receiving and accounting documents; if not, the contracting officer informs the commissary officer of the type of receiving report to be used. A copy of the purchase instrument is sent to the installation veterinarian as a request for inspection.

37. DISCREPANCIES IN SHIPMENTS. When discrepancies in shipments of DPSC-supplied items are noted, contractor or carrier liability should be determined and the carrier's

freight bill annotated. The commissary officer's account should be debited with the actual net amount received. A copy of the freight bill, on which the carrier's representative acknowledged the shortage or damage, is furnished the contracting officer with the receiving report. The annotated freight bill is forwarded to the vendor as a basis for claim against the carrier. Discrepancies in shipments of locally purchased supplies are reported to the installation contracting officer on the receiving report. The receiving warehouse foreman should have the carrier's freight bill corrected to reflect the actual receipts. The corrected freight bill should be signed by the carrier's representative and the receiving warehouse foreman. The original copy of the corrected freight bill is filed with the commissary voucher copy of the receiving document. Two copies of the corrected freight bill are forwarded to the servicing finance and accounting office with the receiving documents. The finance and accounting officer files one copy of the corrected freight bill with their copy of the receiving document and forwards the remaining copy of the corrected freight bill with the check to the vendor. The vendor may use the carrier's freight bill as a basis for claims against the carrier.

38. VETERINARY INSPECTION AND REPORT OF UNSATISFACTORY ITEMS. Subsistence items are inspected upon receipt by personnel under the supervision of the installation veterinarian. In the absence of veterinary personnel, the items are inspected by personnel under the supervision of the installation surgeon.

a. Inspection. Items are inspected for condition and quantity and for quality to the extent provided for in contracts for direct vendor deliveries. In-storage inspection of subsistence supplies is accomplished by the installation veterinarian or by persons under his supervision.

b. Report of unsatisfactory items. Unsatisfactory subsistence items obtained through local purchase and supply sources established by DPSC are reported on DD Form 1608 (Unsatisfactory Material Report (Subsistence)). The report may be prepared by the commissary officer, veterinary officer, or food adviser. If the report is prepared by a person other than a veterinarian, qualified veterinary food inspection personnel should be consulted in the analysis of the deficiencies. The report is submitted in an original and two copies to the U.S. Army Troop Support Agency. Samples of the unsatisfactory items should be forwarded with the report if practicable. Photographs may be forwarded with the report

when appropriate. A ruler, 12 inches or longer, will be placed beside the item, as a scale, before photographing.

39. STORAGE OF NONPERISHABLE SUPPLIES. The methods of storing grocery items and the conditions under which they should be stored depend upon the nature of the items and the types of containers in which they are received. Nonperishable items, although not so susceptible to spoilage as perishable items, do spoil if they are mishandled, improperly stored, or stored for excessive periods of time. Correct, carefully planned storage procedures not only prevent damage to the items but also insure speed and efficiency in receipt, handling, and display. Storeroom conditions and storage precautions and procedures are described below.

a. Storeroom conditions. Some factors which affect the quality and usefulness of nonperishable items in storage are cleanliness, temperature, moisture, ventilation, and light.

(1) Cleanliness. Storerooms must be kept free of dust, dirt, insects, and rodents. Bagged foods are subject to contamination by dust, dirt, and other extraneous material. Insects, such as roaches, flies, weevils, and moths, attack both natural and manufactured food. Roaches and flies not only contaminate food but also carry diseases. Insect repellants should be used carefully; foods can be contaminated by the repellants or by absorbing the flavor of the fumigants and insecticides. Rodents physically destroy food by feeding, chewing, and cutting bags for nests or nesting material; they contaminate foods with excreta and hair; and they carry filth and disease. The most effective method of control is to prevent entry of the rodents.

(2) Temperature. Freezing temperatures and excessively high temperatures over long periods of time can damage food items in storage.

(a) Freezing. Protection should be provided against freezing of foods in storerooms. Dry products, such as grain, flour, sugar, starch, cereals, and dehydrated foods, are not ordinarily injured by freezing; but canned foods with high water content can be damaged or adversely affected. If canned foods are allowed to freeze, the cans may burst at the seams or swell because of expansion. However, if the cans remain intact, the usefulness and palatability are not harmed, but the appearance may be affected by softening of the product. The emulsified or solid quality of canned cheese and butter, prepared mustard, and mayonnaise is destroyed by freezing, although the food does not spoil.

(b) Excessive heat. A high storage temperature over a long period of time is detrimental to almost all food products. High temperatures encourage bacterial growth, mold growth, and insect infestation and are particularly dangerous when accompanied by high humidity. Chemical action, which causes rancidity in many items, is accelerated by high temperatures. Flour and associated products stored in high temperatures are subject to insect infestation. Excessive temperatures can be partially controlled by providing adequate ventilation.

(3) Moisture. Moisture is detrimental to stored food items because it speeds the growth of insects, bacteria, and molds. Moisture causes flour and similar products to become musty and causes sugar and salt to cake. Dehydrated foods absorb moisture, and as a result, they lose flavor and color. Dried vegetables and fruits stored in moist storerooms are subject to insect infestation and molding.

(4) Ventilation. Storerooms must be well ventilated in areas where sharply fluctuating temperature and high humidity prevail; ventilation helps to prevent high temperatures and protects food from spoiling.

(5) Light. Damage from light is restricted to foods that are packed in glass or other transparent containers. Exposure to light causes foods to change color and may affect the flavor of foods that contain or are composed of oils and fats.

b. Storage precautions and procedures. Some precautions and procedures pertaining to storing nonperishable subsistence items are given below.

(1) Shipments should be segregated and, when possible, marked according to date packaged (not date received). Lots should be stored so that the oldest lots are used first; however, if a newer lot shows evidence of deterioration or spoilage, it may be stored so that it will be used first.

(2) Pallets should be used to raise subsistence items off the floor.

(3) Individual lots should be stacked to permit free circulation of air around them.

(4) Lots should not be stacked so high as to cause bursting or crushing of the bottom layer nor to allow

the top layer to be subject to a higher temperature, which is more prevalent near the ceiling.

(5) Items should not be stacked near heated pipes.

(6) Bagged items and those requiring fumigation and insect control should not be stored in corners of the storeroom or against the wall; such storage leaves insufficient space for cleaning and inspecting. Palletized storage should be used to facilitate handling and reduce loss by breakage or handling.

(7) Food items that have been on hand beyond the safe storage period should be inspected carefully for spoilage, leakage, or other damage and should be used as soon as possible, if unharmed by the extended storage period.

(8) Food items that absorb odors, such as flour and cereals, should be kept away from other items that give off distinctive odors. Cocoa, tea, and coffee absorb odors to a certain extent.

40. STORAGE OF PERISHABLE SUPPLIES. An installation-type, cold storage facility in CONUS usually contains five rooms, each designed for a definite purpose: a freeze room for the storage of frozen items, a chillroom for the storage of carcass and chill meats, a chillroom for the storage of shell eggs and dairy products, and two chillrooms for the storage of fruits and vegetables. Depot and installation-type facilities overseas usually consist of a freezer room for the storage of frozen items, chill-temperature fruit and vegetable rooms, and an egg and dairy products room. Suggested storage temperatures for perishable food items are given in table 1.

a. Storage room equipment. Some items of equipment used in storage rooms are as follows:

(1) Cooling units. When existing floor-type cooling units are no longer serviceable, they are replaced with overhead ceiling-mounted, self-defrosting, blower-type units. The units are usually placed over aisle space to facilitate maintenance and avoid curtailment of storage space.

(2) Scales. Accurate scales, graduated in 1/4-pound increments and maintained in good working condition,

Table 1. Suggested storage temperatures for perishable food items

Fruit and vegetable chillrooms		Egg and dairy chillroom 35° F	Frozen food room 0° F or below	Meat chillroom 32° F
35° F	50° F			
Apricots	Apples	Butter	Fish and water foods	Chilled meats and meat products. Frozen meat, meat products, and poultry to be processed in the central meat processing facility are tempered in this room.
Asparagus	Cantaloups	Cheese	Fruits and vegetables	
Beets	Cranberries	Eggs, shell	Fruit juices	
Broccoli	Cucumbers	Oleomargarine	Meat and meat products	
Brussels sprouts	Eggplant	Shortening and lard	Poultry	
Cabbage	Fruits, dried	Yeast, baker's active, dry		
Carrots	Melons			
Cauliflower	Peppers, sweet			
Celery	Potatoes, sweet			
Cherries	Squash			
Collards	Tomatoes			
Corn on the cob				
Endive				
Escarole				
Garlic				
Grapes				
Kale				
Lettuce				
Nectarines				
Onions, green				
Parsley				
Parsnips				
Peaches				
Pears				
Plums				
Radishes				
Romaine				
Rutabagas				
Spinach				

are used in cold storage facilities for test-weighing supplies received and for weighing out small amounts. Scale testing weights should be available, and scales should be tested monthly.

(3) Materials-handling equipment. Collapsed mast height for stacker-type, materials-handling equipment should be a maximum of 68 inches to permit entry into refrigerated trucks and trailers. Stacking capacity of the equipment should not be less than 100 inches.

b. Storage room procedures. Storage room procedures are given below.

(1) The required temperature and category of items to be stored in each refrigerated storage room should be posted on a sign in a conspicuous place outside each room. Figures and letters should be at least 1 inch high.

(2) When shipments of perishable items are received, the packing or receipt date should be marked on the items. The items should be stored in such a way that they can be used on a first-in, first-out basis, except when immediate use is necessary to avoid spoilage.

(3) Perishable items should be stored on 40- by 48-inch pallets, unless shorter dunnage is more practical because of storage conditions or because of item container size.

(4) The height of stacks should be governed by the product, type of packaging and pallets, stability of stack, maximum lifting height of equipment, floorload capacity, and ceiling clearance. At least 1 foot should be left between the top of a stack and air ducts or ceiling-suspended refrigeration systems. At least 2 feet should be left between the top of a stack and the ceiling.

(5) No item should be stored in direct contact with walls, floors, or cooling units. A space of at least 4 inches must be left between stacks and walls.

(6) Stacks of pallets should be started from the wall and built toward the aisle, and tiers of pallets should be placed vertically.

(7) Established policies must be observed when food items that absorb foreign odors are stored. Smoking

must be prohibited in refrigerated rooms. Eggs and butter must not be stored in a room where fresh fruits, vegetables, and smoked meat and fish are stored. Shortening and lard should be stored in the egg and dairy room or meat chillroom; however, if they are sealed in metal containers, they may be stored in a room with fresh fruits and vegetables.

(8) All frozen food items should be stored immediately in the freeze room and kept frozen until sold. Any frozen item that has thawed or partially thawed should be handled as recommended by the installation veterinarian.

(9) Fresh fruits and vegetables that are to be held for more than 2 days must have ventilation within the stack. Unually, these items can be arranged with open spaces in the stacks to permit them to be cooled satisfactorily and permit gaseous vapors to be carried away. Eggs that are to be held more than a week or are received in fiberboard cartons should be stored so that each tier of the stack is stripped with thin boards or laths to provide ventilation.

c. Safety measures in cold storage facilities. The following safety measures should be observed in cold storage facilities:

(1) Doors should be equipped with latches and locking devises that permit the door to be opened from the inside even though it is locked from the outside.

(2) An alarm bell that can be activated from within the freeze rooms should be installed at each cold storage facility.

(3) An ax marked with luminous tape should be placed adjacent to the door in each freeze room to permit forceful exit in case of failure of door latches and alarm bell.

(4) An automatic emergency light should be installed above the exit in each refrigerated room. If an emergency light is not used, luminous tape should be placed around the push bolt inside the exit door, and luminous tape directional arrows should be placed inside the room to direct personnel to the door in case of power failure.

(5) Employees working in refrigerated rooms should be provided with clothing suitable to maintain normal body warmth, and a self-contained breathing apparatus for reserve purposes should be provided at the main entrance.

Section III

GROCERY DEPARTMENT MERCHANDISING

41. ESTABLISHING SALES PRICES. Standard prices established by DPSC are used for all specification items furnished by DPSC for resale in the commissary store. These prices are listed in the Federal Supply Catalog, Department of Defense Section, C8900-PL series. Items purchased by DPSC, which are not listed in the Federal Supply Catalog, and locally purchased items are priced in accordance with the following:

a. Invoice price. The invoice price is the net unit cost of an item to the Government, considering discounts in excess of 2 percent offered by the vendor. When the discount is in excess of 2 percent, the entire discount amount is deducted from the invoice before the unit selling price is computed. The discount is applied against one or more items appearing on the invoice, eliminating the need to prorate the discount against every item on the invoice.

b. Unit price. Prices are expressed in dollars and cents for the standard unit of measure for each item. Items such as cigarettes, tea bags, and candy bars are priced and sold by the box.

c. Three-mill rule. Under the three-mill rule, a fraction of a cent less than 3 mills is disregarded, and each fraction of 3 mills or more is computed as a whole cent. The three-mill rule is applied to the invoice price for all locally procured brand-name items, including unprocessed meat market items and specification items for the grocery market. This three-mill rule also applies to DPSC-contracted items when such contracts cite installations stock funds. The three-mill rule is used by commissary stores in the United States until such time as unidentifiable gains or losses are revealed by an accountability inventory.

d. Variable-mill rule. When unidentifiable gains or losses are noted, the mill rule is established in accordance with data given in table 2. This mill rule remains in effect for the entire period between accountability inventories. When changes in the mill rule occur, prices of items received before the change are not recomputed until additional shipments are received.

Table 2. Variable-mill rule

Gain percentage of sales	Mill rule
1.50 and higher	5
.75 to 1.49	4
.00 to .74	3
Loss percentage of sales	
$0 - 450,000	
.00 to .74	3
.75 to 1.49	2
1.50 and higher	1
$450,001-1,500,000	
.00 to .49	3
.50 to 1.00	2
1.01 and higher	1
$1,500,001 and higher	
.00 to .38	3
.39 to .75	2
.76 and higher	1

e. Special or combination offers. Identical items purchased in multiples, such as two or more bars of soap fastened together by the manufacturer or distributor, are priced according to the invoice price at which the unit was purchased. These items may not be sold as separate items. Combination offers composed of different items, such as a free can of cleaner with a can of wax or specially labeled brand-name items indicating a reduction in price, are priced according to the invoice price at which the specially labeled items or combination units were purchased. Care should be exercised to insure that multiple units, combination units, and specially labeled items are listed separately and specifically identified in the applicable pricelist or supplement. This special pricing procedure pertains only to items which

(1) are purchased as combination units.

(2) are packaged, labeled, or so attached that they can be clearly identified from the regular stocked item.

(3) have individual unit invoice prices.

f. Equalization of prices. The equalization of prices among several brands or sizes of the same item by establishing an average price is not authorized. Also, items which are packaged and priced identically but differ in flavor or color are considered one item; for example, dessert powders, soap bars in colors, paper products in colors, and pet foods.

42. PRICING GROCERY ITEMS. Prices for grocery items are based on the latest invoice price received within the accounting period. As each lot is received, the current mill rule

is applied to the invoice price and where applicable, selling prices are changed, posted to the pricelist, and placed in effect within 3 working days after receipt of the shipment. Prices for DPSC-furnished specification items are those listed in the Federal Supply Catalog, C8900-PL series.

a. Price change record. To insure an accurate determination of selling prices, the commissary officer must annotate each item on the record copy of the commissary pricelist with the last delivered procurement price adjusted by the current mill rule when such adjustment results in a change in the current selling price. In addition, the document debit voucher number and date must be noted. The commissary officer should maintain sequentially numbered, locally reproduced records for notification of price changes. These forms should be sequentially numbered for each quarter, and the format should include the old selling price, the new selling price, and the date of receipt of supplies. The completed price change record should be forwarded to each supervisor who maintains a pricelist. Each supervisor records the price changes on his pricelist, initials the format, and returns it to the commissary accounting section. After the forms have been circulated through appropriate supervisors, they are filed with the pricelist record copy. Price changes may initially be furnished by telephone, but must be followed by a sequentially numbered price change format. All price changes must be made no later than 3 working days after receipt of subsistence supplies.

b. Price reductions. Prices of brand-name items sold in commissary stores may be reduced when the commissary officer determines that such action is in the best interest of the Government. Additionally, prices may be reduced on damaged or distressed specification items stocked in commissary stores at installations not having a troop issue mission. The commissary officer prepares DD Form 708 (Inventory Adjustment Monetary Account) on items recommended for price reduction. The original and one copy are submitted to the installation commander or his designated representative for approval. At the end of the accounting period the dollar value of price reductions is reported on DA Form 3030 (Food Facilities Summary). Circumstances under which prices may be reduced are as follows:

(1) Slow turnover items. Slow turnover items which have been on hand for at least 90 days and which have stocks that exceed requirements for 180 days may be reduced to stimulate sales. The reduction may not exceed 50 percent of the current selling price.

(2) Damaged containers or packages. When the contents of damaged containers may be eaten or used but the items cannot be sold at full price because of dents, torn or missing labels, or a shopworn condition, they may be reduced by not more than 50 percent of the current selling price. Contents of damaged packages that are sold in multiple packs, such as cigarettes, are reduced in proportion to the number of units missing. For display purposes, items that have been reduced in price are grouped in a prominent location to insure sale. Reduced-price items may not be displayed with regular stock items.

43. PRICELISTS. The commissary officer prepares a quarterly commissary pricelist to be used for locally purchased specification items and for brand-name items. An excerpt from the commissary pricelist is shown in figure 8. The format should provide sufficient space opposite each entry to permit manual posting of price changes.

a. Format. The format for the pricelist should include, as a minimum, the following entries:

(1) Title page. The first page of the pricelist is the title page and should include the following:

(a) Name of installation.

(b) Commissary pricelist.

(c) Period covered. "This pricelist covers the period (inclusive dates of the quarterly accounting period)."

(2) Index. An index should precede the body of the pricelist. The index should identify by page numbers all product groups appearing in the pricelist.

(3) Body. The body of the pricelist should be divided into two basic sections--brand-name items and locally purchased specification items. Brand-name items are listed according to product groups. An identifying symbol should be established to indicate which items are being discontinued. This symbol should be shown and explained in the index.

b. Supplements. Consecutively numbered supplements to the pricelist are prepared, when necessary, to correct errors or to include new items.

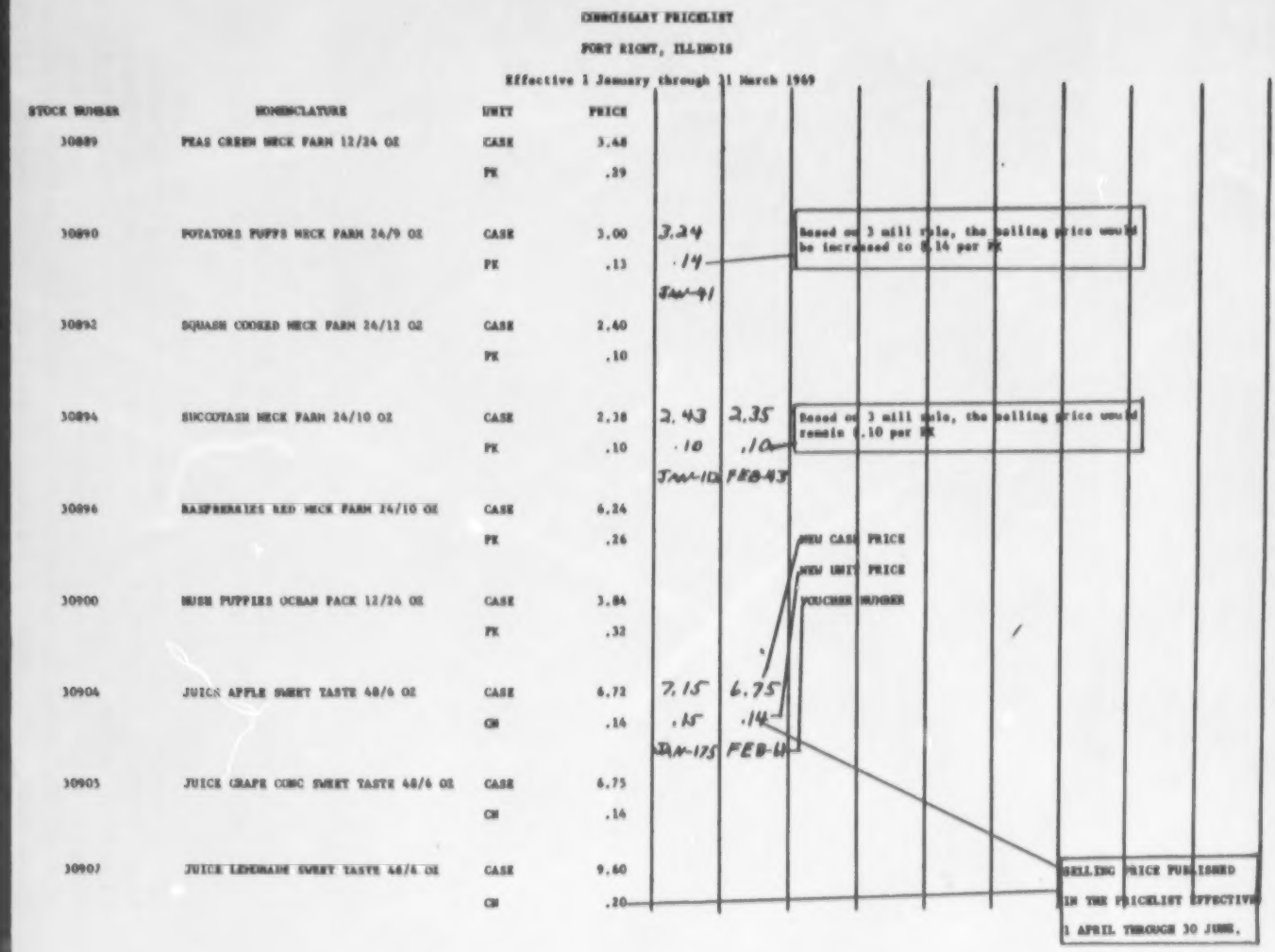


Figure 8. Excerpt from the commissary pricelist.

c. Use. The pricelist is the source of all standard prices used for locally purchased specification items and for selling prices used for brand-name items. Prices for DPSC-furnished items are obtained from the applicable Federal Supply Catalog C8900-PL.

d. Exclusions. The following classes of items are excluded from the pricelist:

(1) Specification items furnished by DPSC.

(2) Exceptional articles.

(3) Processed, nonlisted, and locally purchased items sold through the meat and produce markets.

(4) Composite food package component items.

44. PRICE-MARKING MERCHANDISE. When possible, grocery items are price-marked before they are moved to the sales area. Bakery items, canned milk, baby food, and other fast moving articles need not be individually marked. Vendor packaged items of nonuniform weight that require weighing or price computation, or both, are priced through use of meat market scaling and labeling equipment. Labels should be color coded so that cashiers can readily identify the items as grocery marked items. Worktables and conveyors may be used to facilitate price marking.

a. Price display. Prices should be prominently displayed on shelves where the items are stocked in the sales area. Prices on the front of display case shelves to identify each price group of a commodity aid the patron in selecting desired articles.

b. Verification of prices. The installation commander is responsible for insuring that prices are verified by a disinterested individual each month. This verification is necessary to determine whether prices conform to those published in the pricelist for the current accounting period.

45. DISPLAY METHODS. The amount of display space allotted for grocery items should be governed by their turnover rate and frequency of delivery. Usually, fast-moving items are allotted more space than slow-moving items. Certain items always require special attention to keep shelves fully stocked. Grouping items by commodity automatically lessens restocking problems. The use of adjustable shelving increases display space and decreases the requirement for restacking. These shelves can be arranged so that items fit well on them and more stock per linear foot can be displayed. During holiday seasons, nonperishable items should be displayed in a separate area to prevent the displacement of regularly stocked items. Labor costs and customer convenience should always be

considered in selecting display methods to be used. Some suggested methods for displaying grocery market items are given below.

a. Displays should be arranged as attractively as possible without incurring unnecessary labor costs (fig. 9).

b. Stock should be rotated on the shelves so that customers purchase the older items first.

c. Bakery products should be displayed as near to the checkout area as possible, and care should be taken to insure that these items are sold or removed from the shelves within the date-coded time limits. Cream-filled pastry items in which the sugar to water ratio of the filling is not greater than 3 to 1 are not perishable and do not require refrigeration; other cream-filled pastry items must be displayed under refrigeration.

d. Consideration should be given to the tobacco department within the retail store (fig. 10). Tobacco products should be displayed where they can be observed by store personnel to prevent pilferage. Shelf space allocated should be based on sales volume, and wide aisles should be provided to prevent congestion.

e. Signs, posters, or other information media should not be used to indicate that specification items are a "better buy" than brand-name articles. Identification should be limited to the designation "Specification Item" on the shelf molding, if the items are displayed beside similar brand-name articles, or by a single sign over the gondola, if the articles are displayed in a separate section.

f. Special displays may be used to promote holiday, seasonal, or specific brand-name items; promotional material should be used in conjunction with suitable display techniques if it becomes necessary to move excess or slow-moving stocks to prevent loss to the Government.

46. STOCKING GROCERY ITEMS. All products, except those authorized for vendor stocking (d below), are shelf stocked by commissary store employees. Display shelves and cases should be checked periodically to make sure that stocks have not been depleted; stocks depleted during business hours should be replaced immediately. Methods used to stock grocery items are described below.

Figure 9. Canned and boxed items attractively displayed in a commissary store.

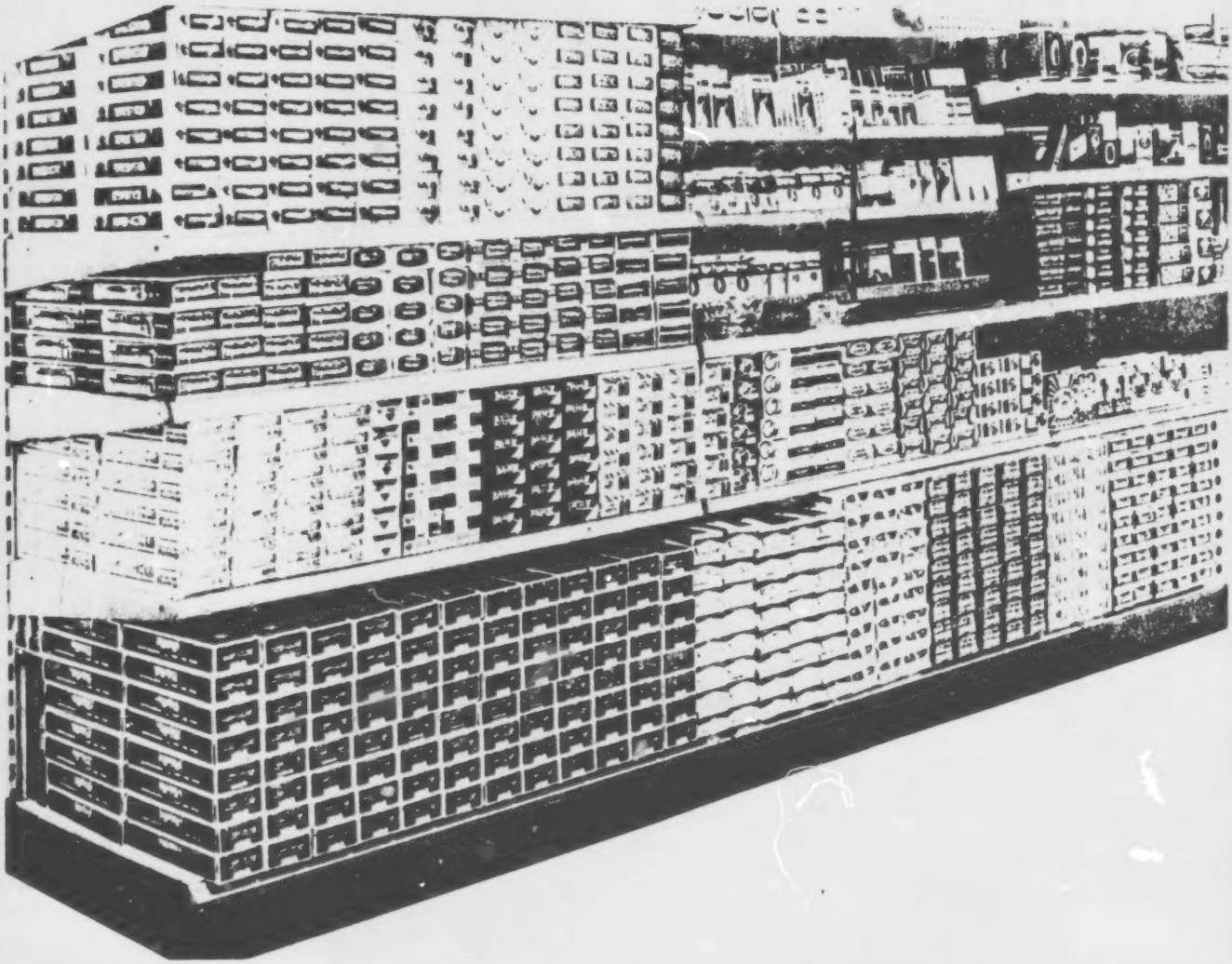


Figure 10. Tobacco display in a commissary store.

a. Tray stocking. Tray stocking (fig. 11) is a display method in which items are stocked in trays made from the original shipping containers. Lots of 12 or 24 cans or boxes can be made ready for display with a minimum of handling. A perimeter cut is made about 1 1/4 inch around the top and bottom of the carton, and the top tray is placed on a conveyor or table. The center carton sleeve is used to transfer the top tier of cans to the tray. All cans are in an upright position and ready for pricing. This method can be used for many items, and it is especially beneficial for fast-moving items.

b. Vertical stocking. Vertical stocking (fig. 12) is a display method that places all brands of one particular item directly in front of the patron. If items are stacked horizontally, canned beans, for instance, could extend 12 or 15 feet along the shelf, and the customer would have to walk that distance to compare brands and prices. When items are stocked vertically, the patron can see the whole grouping at a glance, make a selection, and move on without backtracking and interrupting the traffic flow.

c. Full vision stocking. Full vision stocking (fig. 13) is another method of vertical display that is especially adaptable to bulk, fast-moving items, such as paper products, soaps, and detergents. Each line item is displayed from the bottom to the top of the shelf with intermediate shelving removed. This method of stocking facilitates patron selection and results in a saving of space by eliminating the intermediate shelving.

d. Vendor stocking. Vendor shelf-stocking services are authorized for Army commissary stores located in the United States and Okinawa. Major oversea commanders may authorize acceptance of such service on a command-wide or selective basis as deemed appropriate. Offers by supplier representatives to provide the service must be voluntary and without cost or obligation to the Government.

(1) Policy. The commissary officer issues a shelf-stocking permit to each vendor shelf stocker after the stocker furnishes proof that he has been authorized by the supplier to provide the services. The commissary officer or his representative assigns specific spare allocations for vendor shelf-stocked products. Commissary store employees or members of their families are not authorized to accept employment from vendors as shelf stockers.

(2) Items in the grocery market that may be vendor stocked. Vendor shelf-stocking services are restricted to the following categories:

Figure 11. Tray stocking.

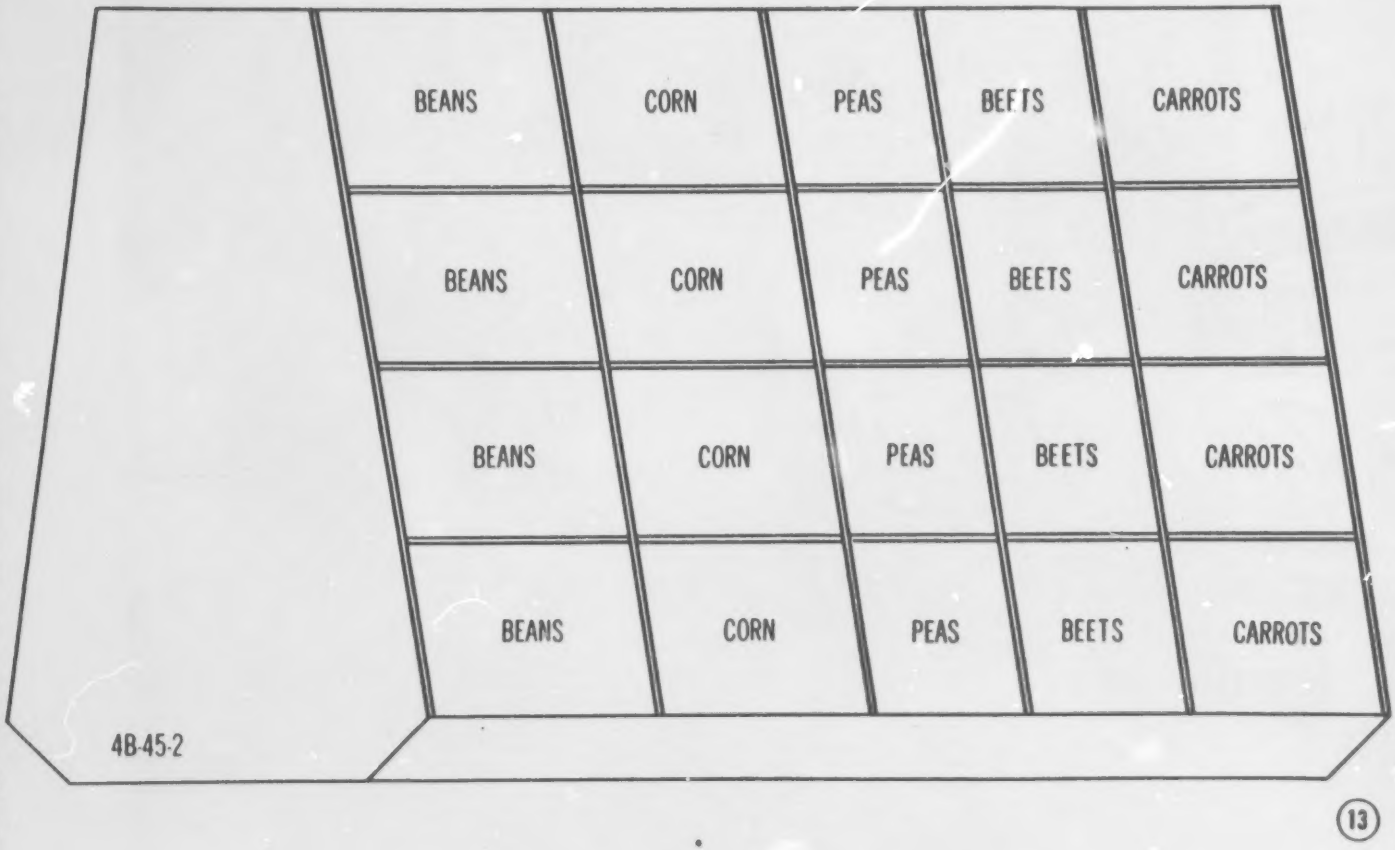
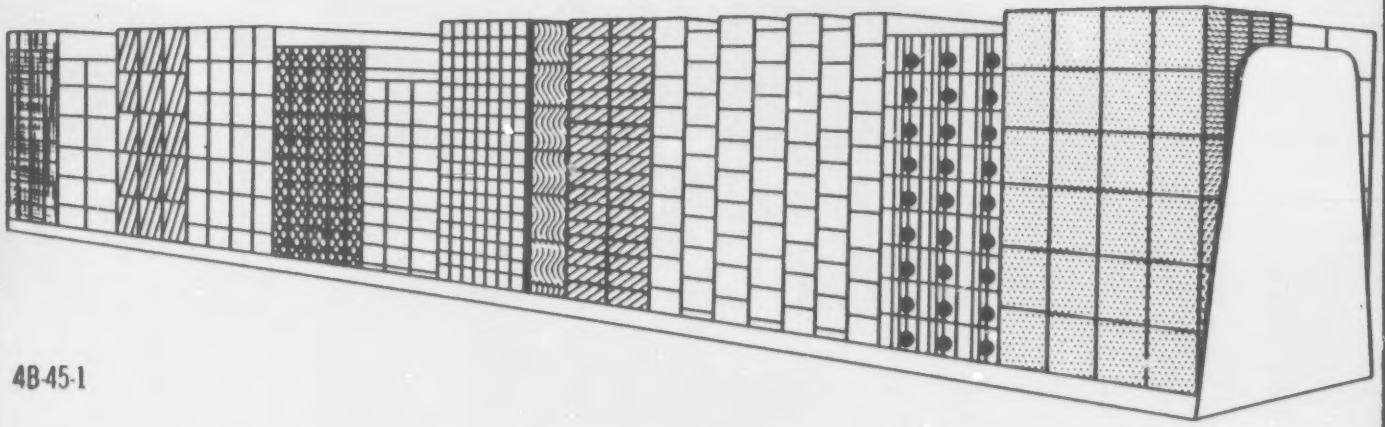


Figure 12. Vertical stocking.



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(14)

Figure 13. Full vision stocking.

(a) Baby food.

(b) Fresh bakery products.

(c) Blind-made products.

(d) Refrigerated dairy products.

(e) Spices, extracts, and dehydrated sauces.

(f) Soft drinks.

(g) Prepackaged luncheon meats.

(h) Snack items--chips, nuts, crackers, cookies, and pretzels.

(3) Violation of vendor shelf-stocking privileges. Conditions under which shelf-stocking permits may be revoked and the sale of a vendor's products discontinued in an Army commissary store are listed below.

(a) Stocking unauthorized products.

(b) Offering gratuities, gifts, or other items to commissary store personnel.

(c) Extending displays beyond the space specifically assigned.

(d) Shifting or interfering with competitor products.

(e) Failing to provide scheduled service.

(f) Pilfering or committing any act that would cause the government to overpay or to pay a fraudulent claim.

47. BLIND-MADE PRODUCTS. Blind-made products are made by nonprofit agencies for the blind and are produced in workshops employing blind persons. The purchase and resale of blind-made products in commissary stores is required under the provisions of the Code of Federal Regulations.

a. Types of blind-made products. The types of blind-made products available for stockage in commissary stores include the following:

(1) Household brooms.

(2) Brushes.

(3) Floor mats.

(4) Laundry accessories.

(5) Kitchen products.

(6) Wax applicators.

(7) Mops.

(8) Sponges.

(9) Household cloths.

(10) Pot holders.

b. Display equipment. Brooms, mops, and many other blind-made items are bulky and awkward to display without proper display equipment. There are several types of display equipment available for blind-made products, including broom racks, mop racks, dump baskets, or a complete display stand to accommodate all blind-made products. Display equipment may be placed at the end of gondolas or between regular displays. Many stores display blind-made items in standard gondolas beside other household supplies.

c. Ordering blind-made products. The contracting officer should send a request for blind-make items to the National Industries for the Blind (NIB), 50 West 44th Street, New York, N.Y. 10036 for designation of the agency to which orders for blind-made products should be forwarded. This request may be made by letter or on a form provided by the NIB. Upon receipt of the name and address of the agency designated to receive orders, the original delivery order, DD Form 1155, (Order for Supplies or Services/Request for Quotation), and all subsequent orders are sent to that agency until a notice of change in source of supply is received from the NIB. A copy of each purchase order for blind-made products must be forwarded to the NIB.

d. Shipment and delivery. All shipments are made within 10 days from the date the vendor receives the order. Delivery is f.o.b. destination. All transportation charges

are paid to any destination within the continental United States. All blind-made items are prepriced at the authorized sales price.

Section IV

FROZEN FOOD DEPARTMENT

48. GENERAL. The frozen food department is an extension of the grocery, produce, meat, and bakery departments, lengthening the shelf or case life of a wide variety of different foods. Many of these items would be perishable if not frozen; however, frozen foods maintained at the proper temperature stay fresh for months instead of days. Unlike any other department in the commissary store, the frozen food department sales volume depends not only on the store storage and display facilities but also on the size and operating condition of customer freezers. Most older or apartment sized refrigerators have little or no storage space for frozen foods. On the other hand, people with separate freezers or large freezer-compartments can make use of more types of frozen food and discover the convenience of ready-prepared dishes and the taste of food captured at the peak of flavor. In general, higher income families have better facilities for storing frozen foods and can afford the higher-priced convenience and fancy prepared foods sold in the frozen food department. Because of the convenience and variety of frozen foods available, the frozen food department plays an important role in creating a distinctive store image.

49. LOCATION AND LAYOUT. Because of the large number of impulse and specialty items stocked in the frozen food department, it is essential that the location and layout of the department be designed to achieve maximum sales and customer convenience.

a. Location. Customers are aware that keeping frozen foods out of the freezer too long will cause them to begin thawing and affect their quality. When the frozen food department is located near the beginning of the traffic flow, many customers hesitate to pick up their frozen foods first and are forced to return at the end of their shopping tour or they may skip the department entirely. This causes inconvenience to customers and disrupts traffic patterns. To prevent loss of sales and inconvenience to customers, the

frozen food department should be located near the end of the traffic flow so that the frozen food department is one of the customer's last stops before checking out. The location of the frozen food department should also provide easy access to the storage freezer. The fast movement of frozen food items from the storage freezer to the display cases is an important factor in preserving its quality.

b. Layout. The layout of the frozen food department depends upon the space available, on how large a part frozen foods play in the store's plans, and on the type of equipment used. Although there is a wide variation from one store to another in the amount of space devoted to frozen foods, there are display cases available to fit the needs of any commissary store. Separate freezers may be used to keep frozen meats near the fresh meats, and special movable freezers or "spot" freezers may be used for tie-in promotions in connection with other departments. Improvements in the design of frozen food display cases have been instrumental in gaining customer acceptance of frozen foods. Frozen foods can now be displayed in the open and within easy reach of customers in attractive, well-lighted freezer cabinets (fig. 14). As is true of other types of display cases and shelving units in the commissary store, the trend today is from horizontal to vertical display of frozen foods. By taking advantage of the additional space available above reach-in freezer cabinets, and by using vertical freezers (fig. 15), the number of cubic feet of frozen foods capacity per square foot of floor space in the department can be increased.

50. PERSONNEL. Often, the volume of sales in the frozen food department will not justify a full-time manager. In many cases, one person is responsible for both the produce market and the frozen food department. Because of the perishable nature of frozen foods, the person in charge must be reliable, conscientious, and constantly alert. He must be depended upon to check the temperatures of the storage freezer and the display cases regularly and to make sure that the items in the display cases are stocked to the proper level to maintain quality. He must be able to work quickly when price-marking items and restocking the display cases to prevent thawing and loss of quality. He must maintain the proper number of facings for each item in the display cases to achieve maximum sales. He must do all these things in addition to the usual departmental responsibilities such as checking inventory and ordering.

51. TYPES OF FROZEN FOODS. In many ways, the frozen food department is a separate store within a store. Grouped

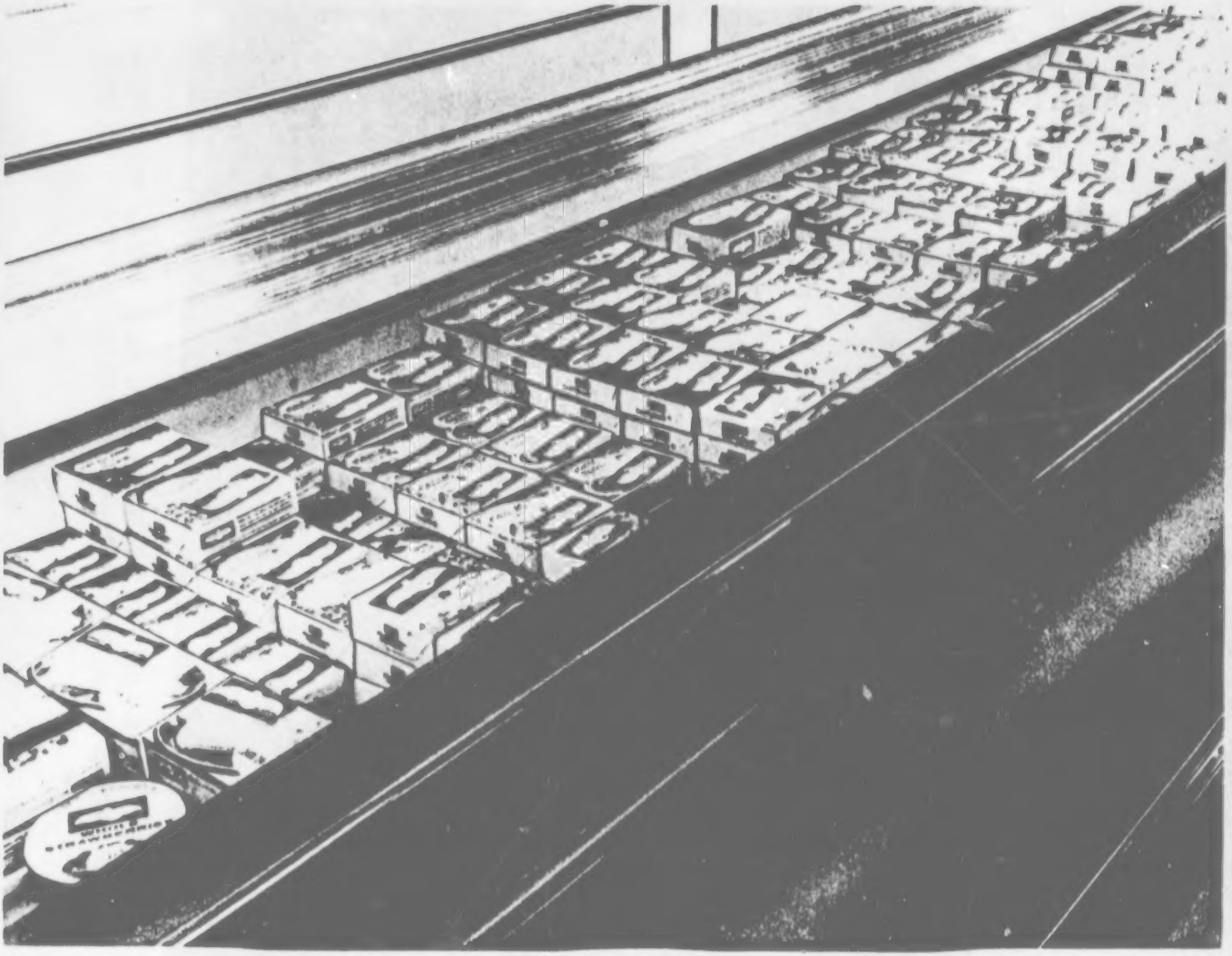


Figure 14. Display of frozen fruits and vegetables.

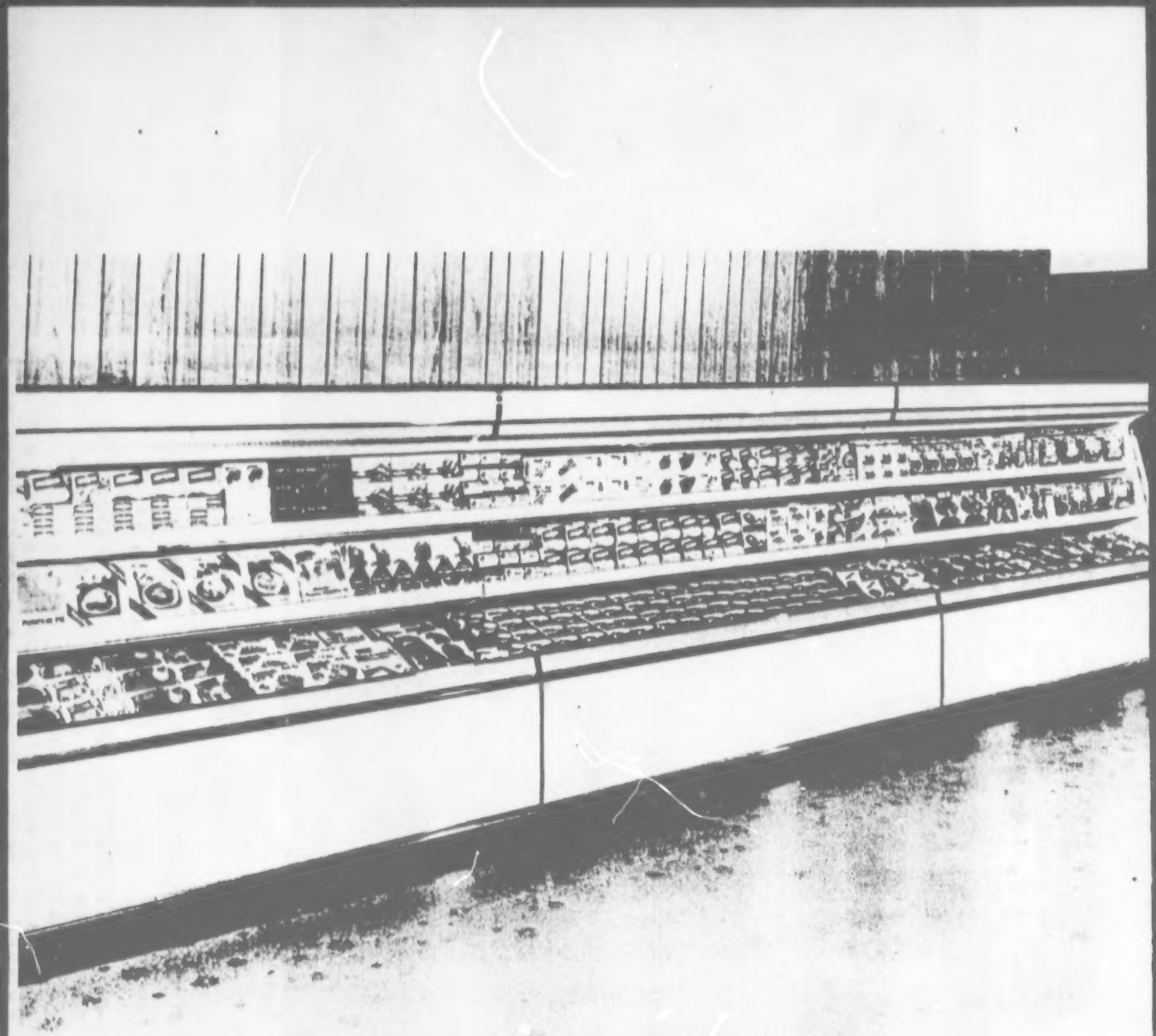


Figure 15. Frozen fruits and vegetables in vertical display case.

together in one department are a wide variety of foods, including meat, vegetables, fruits, bakery goods, and prepared foods. The frozen food department in a typical commissary store accounts for about 10 percent of the total selling space, 8 percent of the total number of items, and 9 percent of the total unit sales. The frozen food department is relatively small compared to the other major departments in the commissary store; however, with the exception of the grocery department, no other department contains such a wide variety of foods. In most commissary stores, frozen foods are grouped by type into 15 major product categories. Two of these categories, frozen juices and vegetables, account for about half the total dollar sales in the frozen food department. The major product categories and the approximate percentage of total dollar sales for each category are shown in table 3 below.

Table 3. Types of frozen foods

Product category	Percent of total dollar sales
Frozen juices	25
Vegetables	20
Meat dinners	10
Frozen fish	9
Fruit pies	8
Pastries and baked goods	6
Meat pies	5
Nationality foods	4
Potatoes	4
Frozen fruits	3
Uncooked meats	2
Prepared foods	2
Poultry parts	1
Soups	*
Pet foods	*

* = Less than 1%

52. PRODUCT MANAGEMENT. The advantages of frozen foods make them a sizable factor in the overall store operations. For effective product management in the frozen food department, a wide selection of products that are in demand must be kept on hand. Product management requires constant attention because of the rapid introduction of new products and changes in customer preference.

a. Merchandising. Effective merchandising can create new users of frozen foods and increase the amount bought by regular users. Product displays in the freezer cabinets should be designed to encourage complete department shopping. High-demand items such as frozen juices and vegetables may be scattered throughout the department, or they may be placed at each end of the department with semi-demand and impulse items placed between.

b. Stocking displays. Foods are frozen to preserve them at the peak of quality. Frozen foods deteriorate and lose their quality more rapidly when the temperature at which they are kept is too high and the food begins to thaw. Temperatures in the display cases should be checked at least twice a day to be sure the products are kept at 0° F. or below. When display cases are stacked, damaged packages should be removed because they may be of inferior quality due to deterioration and could give customers a bad impression of the department. Frozen foods have a relatively long shelf life; however, they cannot be kept indefinitely before being used. Therefore, code dates of the packages should be checked when the display cases are stocked, and outdated packages should be removed from display.

c. Space allocation. The allocation of display space is based on the percentage of sales for each product category. Although sales vary from store to store, the percentages given in table 3 are based on national averages and may serve as a guide.

53. RECEIVING, HANDLING, AND STORING FROZEN FOODS. Because frozen foods must be kept at a constant low temperature, they must be moved from the delivery truck to the storage freezer as quickly as possible. Adequate personnel should be available at short notice to complete the rapid transfer of products.

a. Receiving frozen foods. The manager of the frozen food department must know the scheduled time of delivery and have his crew ready when the delivery truck arrives. The cartons of frozen foods should be checked against the order as they are unloaded from the truck. They should be loaded on conveyors or stocking carts and moved immediately into the storage freezer. The following advance preparations should be made for the receipt of shipments:

(1) Carryover stock should be consolidated in one corner of the storage freezer before arrival of the delivery truck to provide more workspace for unloading new merchandise.

(2) All handling equipment such as conveyors and stock carts should be ready before the truck arrives to eliminate delays in unloading.

(3) The order should be checked before arrival so that cases can be grouped during unloading for easier and faster storage in the freezer.

(4) All old stock should be moved toward the front of the freezer and new merchandise should be code-dated as it is placed in storage to insure that it will be used in proper rotation.

(5) The temperature of the delivery truck should be checked upon arrival and a check should be made for damaged merchandise to insure that the order has arrived in top condition.

(6) The cartons should be stacked close together in the storage freezer to cut down on the circulation of warm air when the door is opened and closed and to prevent thawing and frosting up of individual packages.

b. Storing frozen foods. The storage freezer must be capable of keeping products at a temperature of 0° F. or lower and should be large enough to accommodate all items which are not placed in the display cases. When frozen foods are ordered, consideration must be given to the size of the storage freezer so that enough extra stock of fastmoving items may be kept on hand and yet avoid having excessive stock which ties up money and complicates storage problems.

54. PRICE-MARKING AND BAGGING FROZEN FOODS. Because of the perishable nature of frozen foods, the price-marking station should be located close to or in the storage freezer so that products are subjected to less time at room temperature, and frost will not be allowed to accumulate on the packages.

a. Price-marking. When the display cases in the frozen food department are restacked, only as many packages should be removed from the storage freezer as can be price-marked and placed in the display cases within half an hour. This minimizes thawing and preserves the quality of the food.

b. Bagging. Frozen foods pose special problems for the customer and for the store. Most stores use special insulated bags or wrappers for bagging frozen foods to protect them while the customer returns home. This practice

promotes good customer relations because the customer feels that the store is conscious of the need for careful handling and tries to keep frozen foods in the best possible condition.

Section V

DAIRY DEPARTMENT

55. GENERAL. The dairy department is an important part of the commissary store. Fresh milk is one item on which the commissary store patron saves a considerable amount of money. A wide variety of cheeses are sold in the dairy department as well as eggs, butter, and other milk products (fig. 16). The turnover of products in the department is extremely rapid and requires constant management. The average dairy department requires a full time attendant to keep the cases filled with fresh milk and other dairy products. The majority of commissary store patrons buy at least one dairy item, and sales are centered around the five or six high-demand product groups which account for as much as 80 percent of the department dollar sales. The dairy department contributes substantially to the commissary store image and to the overall commissary store sales.

56. LOCATION AND LAYOUT. The dairy department with its high-demand items can usually be depended upon for steady commissary store sales. For this reason, the location and layout of the dairy department should be planned so that shoppers are attracted through several other departments while they are en route to the dairy department.

a. Location. The dairy department is usually located along the perimeter of the store, either at the rear or at the side farthest from the entrance. This location provides maximum drawing power and maintains an efficient straight-line layout. In some stores, however, the dairy department is located either at the front corner or at the rear corner of the store close to the storage cooler to shorten stocking trips and reduce labor costs.

b. Layout. Because many shoppers intend to buy one or more high-demand dairy items, the dairy department can be used to provide a planned traffic flow. Once shoppers reach the dairy department, they can be attracted to one or more semidemand or impulse items in the department. An effective

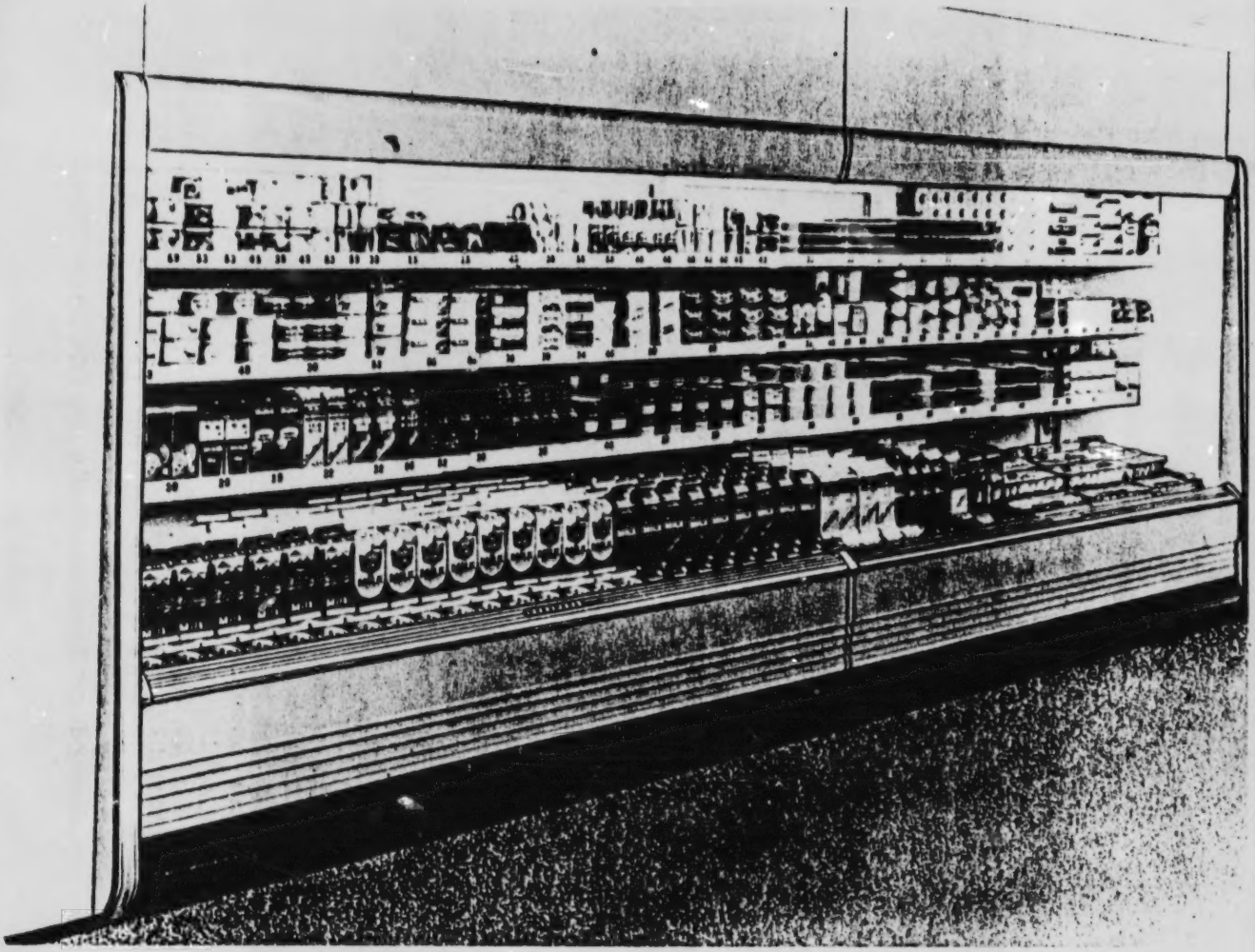


Figure 16. Display of dairy products.

layout should be designed to channel customers through the department, reduce congestion, and speed shopping. There are many different layouts and a wide variety of display cases available to accomplish this objective.

(1) Straight-line layout. The straight-line department layout (fig. 17) is designed to promote one-way shopping. In this type of layout, the shelving across the aisle from the dairy cases is continuous, providing no exits or entries other than at the end of the department. Thus, all traffic flows parallel with the display cases.

(2) Cross-aisle layout. Dairy display cases may also be placed on both sides of the aisle. This layout accommodates more shoppers at a given time, but may also present congestion problems during peak shopping periods as shoppers move from side to side shopping both sides of the aisle.

(3) L-shape layout. When the dairy department is located in the rear or front corner of the store, the display cases can be split and arranged in an L-shape. This arrangement provides maximum use of corner space which is often wasted otherwise.

57. PERSONNEL. Dairy departments with a low volume of sales usually require only one person for operation. In some cases, the same person may handle the frozen food department. Departments having a larger volume of sales require additional workers who are usually employed on a part-time basis. The trend today is for the dairy department to be headed by a dairy department manager. However, some stores continue to classify the person in charge as a clerk, even though he performs the same duties as a department manager.

a. Manager. The individual in charge of the dairy department is responsible for planning, ordering, receiving, storing, displaying, rotating, cleaning, and coordinating all activities in the department. He is also responsible for directing and controlling the supplier's driver or salesman who delivers and stocks dairy items, often on a daily basis. This entails assigning and maintaining space allocations in addition to maintaining the display case layout.

b. Clerks. In a store with a medium or large-sized dairy department, clerks are often employed (usually on a part-time basis) to assist the dairy department manager

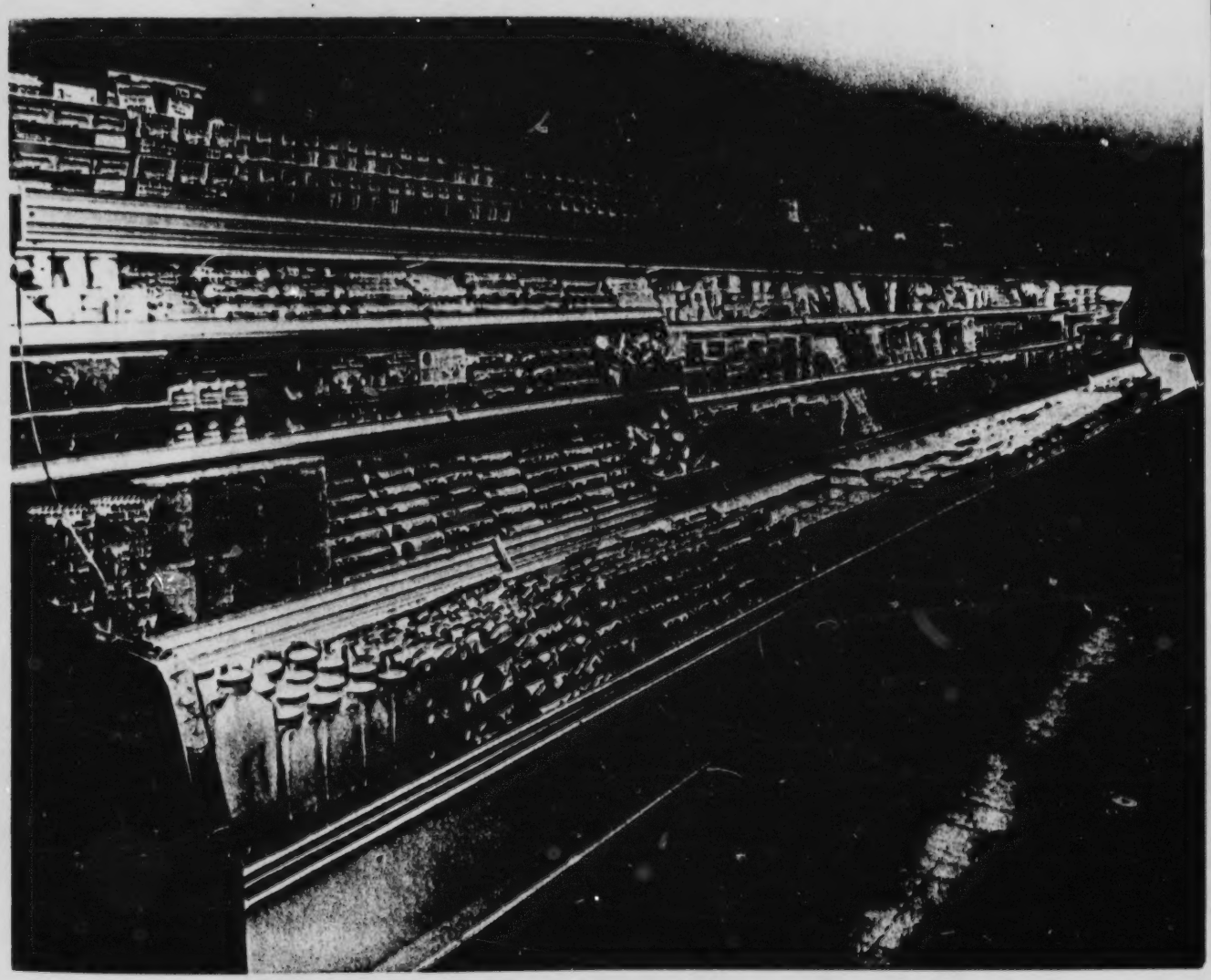


Figure 17. Dairy products properly displayed in a straight-line layout.

in the operation of the department. Approximately 58 percent of an employee's time is required for pricing, handling, and stocking dairy items in the display cases.

58. TYPES OF DAIRY PRODUCTS. The dairy department contains a few high-demand items, a number of semidemand items, and a variety of impulse items. The four major high-demand product groups are milk, eggs, margarine, and butter. Ice cream could be considered the fifth, for many stores classify it as a dairy item even though it is displayed in the frozen food cases. In some stores, ice cream is considered a part of the frozen food department instead of the dairy department. If considered as a single product group, cheese could qualify as a sixth high-demand product group, however, in many stores, the many varieties of cheeses are grouped by type into separate product groups such as bulk cheese, process cheese, natural cheese, and cottage cheese. Such groupings rank in the semidemand or impulse categories. The breakdown of sales by product group is roughly as follows:

a. High-demand items. High-demand items such as eggs, margarine, ice cream, milk, and butter account for about 80 percent of the total department dollar sales.

b. Semidemand items. Semidemand items include cream, cottage cheese; bulk cheese; process cheeses; and natural cheeses and account for approximately 14 percent of total department sales.

c. Impulse items. Impulse items such as cheese spreads, cheese dips, buttermilk, dessert toppings, and refrigerated biscuits make up about 6 percent of the total department sales.

59. PRODUCT MANAGEMENT. Product management in the dairy department is a continuing process. High-demand dairy items turn over rapidly and display cases must be constantly replenished. A successful merchandising program is based on the coordinated ordering, receiving, handling, and storing of dairy items.

a. Merchandising. The allocation of display space is based on the percentage of sales for each item stocked. This allows an adequate quantity of items to be displayed from which customers may made their selections. Merchandising is accomplished primarily through the arrangement of the items in the display cases. Some effective methods of merchandising dairy products are as follows:

(1) Placing high-demand items throughout the department. These items may be positioned in the display cases on one, two, or three tiers of shelving, depending on the style of display cases in the department. This method is particularly effective when the normal flow of store traffic is from both directions.

(2) Positioning all the high-demand items at the far end of the department. The high-demand items are preceded by semidemand items which are in turn preceded by impulse items. The theory behind this arrangement is that shoppers are more likely to pick up impulse items if they are exposed to them first. Also, shoppers must walk the entire length of the department to reach the high-demand items, giving them the opportunity to shop the entire department.

(3) Shelving all the high-demand items on the first tier of the display cases, with the impulse items and semidemand items stocked on the upper tiers between waist level and eye level. When this arrangement is used, the impulse items are usually placed at the head of the traffic flow.

(4) Shelving all the high-demand items in the center of the department, with semidemand and impulse items on each side. This arrangement is also best suited to stores in which the flow of traffic through the department is from both directions.

b. Stocking displays. When display cases in the dairy department are stocked, old merchandise should be removed from each section, and the sections should be wiped clean with a damp cloth. Code dates on the old merchandise should be checked and all damaged or outdated items removed. Good merchandise should be returned to the case and placed to the front. Fresh stock should be placed behind the old merchandise.

60. ORDERING DAIRY PRODUCTS. The varying case lives and turnover rates of dairy items, the multiple sources of supply, and the different ordering times for each supplier's goods make the ordering of dairy products a complex function.

a. Case life of dairy products. There are extreme differences in the case lives of dairy products. For example, milk has a case life of about 2 days versus 5 to 10 days for eggs and 3 months or more for certain types of cheese.

b. Turnover rates. Turnover rates for dairy products vary considerably. Some high-demand items turn over as fast as once a day; however, some impulse items turn over at a much slower rate.

c. Orders for dairy products. Often, five or more suppliers deliver dairy products to the store. Separate orders are usually made for each supplier, usually when the supplier's driver or salesman is making a delivery of a prior order.

61. RECEIVING, HANDLING, AND STORING DAIRY PRODUCTS. Coordinating the ordering and receiving functions in the dairy department is important because the salesman usually delivers an order on the same day he takes an order for future delivery. Therefore, advance preparation is essential for effective receipt, handling, and storage of dairy products.

a. Advance preparations. The following advance preparations should be made for the receipt of dairy products.

(1) Merchandise in inventory should be consolidated in the cooler and code dated. Items in the display cases should also be checked to determine what must be ordered and to make room for the arriving shipment. The "first-in, first-out" method should always be followed; that is, place new stock in back of old stock.

(2) Turnover records should be checked to determine the rate of increase or decrease in sales of products to be ordered.

(3) Advertising and promotion plans should be checked to insure adequate stocks of items that will be featured or promoted.

b. Receiving dairy products. In many stores, the supplier's salesman stocks the display cases, and the dairy manager supervises and checks his work. Little or no reserve stock is maintained in the cooler of many items that are placed directly in display cases. Yeast, cream cheese, and other types of cheeses are examples. All dairy products received should be

(1) counted and checked against the invoice.

(2) grouped by category or by destination (milk or butter for the display cases or for the storage cooler).

(3) checked for damage or deterioration.

(4) inspected for freshness and code dated if not previously code dated by the manufacturer.

(5) price-marked before being put into the display cases.

c. Handling and storing dairy products. Proper handling and storing of dairy products should begin when the products reach the store and continue until they have been stocked in display cases and finally bagged at the checkout counter. Proper handling is essential in maintaining the freshness and salability of dairy items. Some essential procedures for handling and storing dairy items are as follows:

(1) Standard stock rotation procedures should be used to prevent outdated goods in both the storage cooler and the display cases.

(2) Display cases should be stocked during slack shopping periods to reduce inconvenience to shoppers and to avoid interruption by shoppers.

(3) Extreme care should be exercised in handling fragile dairy items, such as eggs and milk, to prevent breakage.

(4) Proper temperatures should be maintained in the display cases and the storage cooler to prevent loss of freshness and spoilage.

(5) Display cases and storage cooler should be kept clean at all times to prevent odors from accumulating and to avoid bacterial growth.

(6) Trips between the storage cooler and the display cases should be planned to accomplish several tasks at the same time.

APPENDIX A

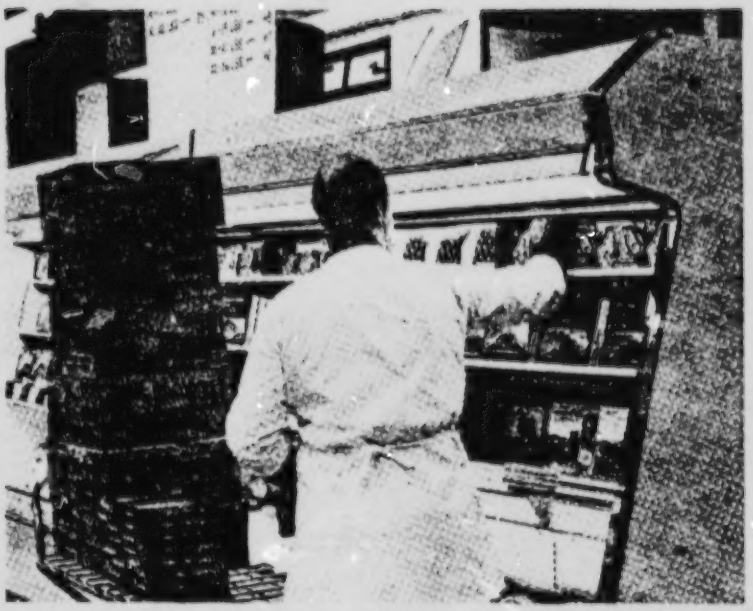
REFERENCES

AR 31-200	Army Commissary Operating Procedures.
AR 37-103	Finance and Accounting for Installations Disbursing Operations.
AR 420-54	Air-conditioning, Evaporative Cooling, Dehumidification, and Mechanical Ventilation.
AR 420-76	Entomology Services.
AR 735-5	Property Accountability: General Principles and Policies and Basic Procedures.
TM 5-632	Military Entomology Operational Handbook.
TM 5-634	Refuse Collection and Disposal; Repairs and Utilities.
TM 10-414	Grocery Department Operations, Commissary Stores.
TM 10-416	Produce Market Operations, Commissary Stores.
TM 10-417	Meat Market Operations, Commissary Stores.
SB 10-510	List of Blind-made Household Articles Authorized for Stockage and Sale in Department of the Army Commissary Stores.
SB 10-512	Commissary Store Marketing Data and Guidance.
SB 725-10	Equipment and Operating Supplies for Army Commissary Stores.

Note: Appendix B and C have been deleted because of military specific materials.

APPENDIX D

FROZEN FOOD



Stocking the 240 feet of multi-deck cases starts early in the morning so that little if any re-stocking has to be done during customer hours.

When Fort Monmouth got a new commissary over a year and a half ago, one of the biggest of many advantages to the Northern New Jersey military shoppers was the increase in frozen food capacity. Instead of 60 feet of well cases, the store now boasts 240 feet of multi-deck cases.

What it meant to Commissary Officer Sid Robbins was the ability to stock new items as well as greater variety and more brands in existing lines. He now has the ability to stock, for example, a higher-ticket line of frozen dinners as well as a popularly-priced brand. He has enough space to expand stockage of any line for seasonal popularity. For instance, the case study on the following pages reflects 58 feet of turkeys just before the Thanksgiving season.

Monmouth's suggestion program, as with other departments in the store, readily accepts new items that appear to have sales potential. With plenty of frozen food case, Robbins can afford to

Commissary officer Robbins has enough flexibility with his cases to be able to stock enough of an item that has high seasonal demand. For example, he has recently greatly increased the linear footage devoted to turkeys for the Thanksgiving and Christmas holidays.

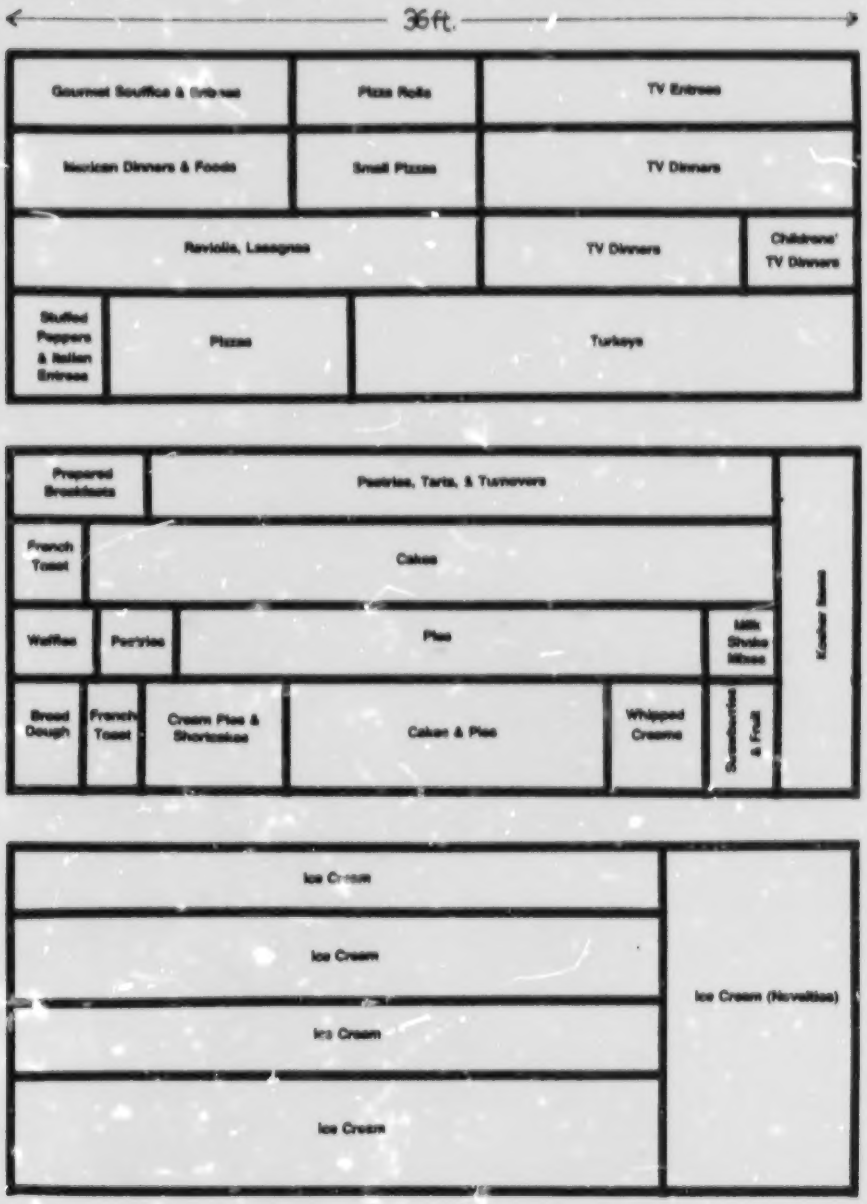
Appendix D was extracted from Military Market Commissary Edition Dec 72

100

What does a commissary do with 240 feet of multi-deck frozen food cases? MM takes a look at the space allocation at Fort Monmouth, showing the amount of linear footage as well as relative placement of product groups. The overall dimensions represent the cumulative footage of 8 and 12 foot cases placed side by side. All horizontal linear footage markings are drawn to scale.

give new frozen items a reasonable amount of time to demonstrate consumer interest. Then, through consumption records and eyeballing, determination is made to either keep the item or drop it quickly. The latter happened to a frozen lobster product that simply wasn't selling, while a recent test of frozen rib eye steaks has proved quite successful.

Sid Robbins and his frozen foods manager must be doing something right in addition to having so much case space, because frozen foods account for an incredible 16% of Ft. Monmouth's sales total. On an average month when the store does $900,000, the frozen food department contributes $144,000.



99.2

SLAB 387A Credit Hours: 4

LESSON EXERCISES

REQUIREMENT. Exercises 1 through 30 are multiple choice. Each exercise has only one single-best answer. For each exercise, indicate your answer on the answer form.

1. For the period 1 July to 31 December, the commissary store at Fort Teefor averaged $67,971 in monthly sales subject to surtax. The classification of this commissary store is

   a. Class 3.

   b. Class 5.

   c. Class 7.

   d. Class 9.

2. Which of the following commissary store personnel is responsible for preparing requisitions and purchase instruments?

   a. Commissary Officer.

   b. Store manager.

   c. Issue clerk.

   d. Supply specialist.

3. Which factor is <u>not</u> to be considered in planning the layout of a commissary store?

   a. Adequate shelf space.

   b. Adequate aisle space.

   c. Traffic control.

   d. Employee convenience.

4. The allocation of sales space in the commissary store is based on the percentage of total store sales for each major department. Approximately what percentage of the available floor space should be assigned to the produce market?

   a. 5.

   b. 10.

   c. 25.

   d. 20.

5. Generally, the commissary officer's interview with food salesmen should be limited to

   a. 10 minutes.

   b. 15 minutes.

   c. 30 minutes.

   d. 1 hour.

6. In order to encourage good relationship with salesmen, the commissary officer should do which of the following?

   a. Try to buy all items presented by the salesman.

   b. Entertain the salesman socially.

   c. Consult the salesman on sales potential and expected movement of an item.

   d. Accept special gifts offered by salesman.

7. Which of the following should be used as a basis for developing merchandise selection criteria?

   a. Sales volume records.

   b. Inventory records.

   c. Commissary consumption record.

   d. Authorized stockage list.

8. How many specification line items are considered to be adequate stockage for the commissary store?

   a. 25 to 50.

   b. 50 to 75.

   c. 75 to 100.

   d. 124 to 150.

9. The selection of items for stockage in newly established commissary stores in the United States is made by the

   a. installation commander.

   b. commissary officer.

   c. item selection board.

   d. major commander concerned.

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Note: Question #10 has been omitted because of military specific materials.

11. Requests for establishment of a group shopping service must be approved by

    a. the commissary officer concerned.

    b. the installation commander concerned.

    c. the major commander concerned.

    d. the U.S. Army Food Service Center.

12. Who is responsible for establishing internal store controls to protect Government funds and property?

    a. Commissary store manager.

    b. Assistant commissary officer.

    c. Commissary officer.

    d. Installation commander.

13. Which of the following items of checkout equipment and supplies is optional?

    a. A sound signaling system.

    b. A price chart or visible wall chart.

    c. A stock of register tapes.

    d. An adequate assortment of paper bags.

14. Which of the following checks may a cashier accept for a $19.89 purchase made on 23 October? (Assume that all identification information is entered on each check).

    a. A check made payable to the Treasurer of the United States for $20, dated 25 Oct.

    b. A check made payable to the commissary store for $19.89, dated 24 Oct.

    c. A check made payable to the U.S. Treasury for $21.89, dated 22 Oct.

    d. A check made payable to the Treasurer of the United States for $25.00, dated 23 Oct.

15. When a cashier realizes, while checking, that he has rung up an item price incorrectly, he should immediately

    a. inform the patron of the error and correct as soon as possible.

    b. inform the chief cashier and have him correct the error.

    c. fill out a cashier's credit slip to correct the error.

    d. request the commissary officer to clear his register.

16. Which of the following authorized improvement projects is considered a building alteration?

    a. Relocation or modification of utilities.

    b. Purchase and installation of lighting fixtures.

    c. Purchase and installation of floor tiling in sales and processing areas.

    d. Purchase and installation of air cooling or heating equipment.

17. Requests for proposed improvement projects are submitted to the

    a. commissary officer.

    b. installation commander.

    c. major commander concerned.

    d. U.S. Army Troop Support Agency.

18. Standards of sanitation for the commissary store are established by the

    a. Army Medical Service.

    b. commissary officer.

    c. installation commander.

    d. post veterinarian.

19. Small children and infants should not be allowed to ride in shopping carts unless

    a. the cart is empty.

    b. the child is accompanied by parents.

    c. the cart is provided with a seat.

    d. the child is too small to walk.

20. Commissary store requirements are generally based on

    a. projected changes in the number of patrons served.

    b. past sales records.

    c. projected sales trends.

    d. seasonal trends and holidays.

21. Commissary supplies authorized for local purchase may be procured by the

    a. installation contracting officer.

    b. commissary store manager.

    c. commissary officer.

    d. supply specialist.

22. Who is responsible for supervising the receipt, storage, and transfer of commissary store supplies?

    a. Commissary officer.

    b. Supply specialist.

    c. Commissary store manager.

    d. Assistant commissary store manager.

23. Subsistence supplies are inspected upon receipt by

    a. store personnel under the supervision of the commissary officer.

    b. the installation contracting officer.

    c. personnel under the supervision of the installation surgeon.

    d. personnel under the supervision of the installation veterinarian.

24. Under the three-mill rule, an item which is invoiced at 26.3 cents should be priced at

    a. 26 cents.

    b. 27 cents.

    c. 2 for 53 cents.

    d. 3 for 79 cents.

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25. Allocation of display space for grocery items is based on

    a. product turnover rate and frequency of delivery.

    b. labor costs and customer convenience.

    c. goods displayed per linear foot.

    d. grouping of items by commodity.

26. A method of display that places all brands of one particular item directly in front of the patron is called

    a. tray stocking.

    b. vendor stocking.

    c. vertical stocking.

    d. horizontal stocking.

27. Blind-made products available for stockage in commissary store include

    a. paper towels, book matches, and stationery.

    b. laundry accessories, laundry detergents, and soap.

    c. floor wax, wax applicators, and furniture polish.

    d. mops, sponges, and pot holders.

28. The frozen food department should be located

    a. near the beginning of the traffic flow.

    b. near the end of the traffic flow.

    c. adjacent to the storage freezer.

    d. adjacent to the dairy department.

29. Which of the following dairy department layouts is designed to promote one-way shopping?

    a. Cross-aisle.

    b. L-shape.

    c. Straight-line.

    d. Continuous-line.

30. Which of the following display methods for dairy products is most effective when the flow of traffic is from both directions?

    a. Placing high demand items throughout the department.

    b. Shelving all high demand items on the first tier of display cases.

    c. Placing high demand items at the far end of the department.

    d. Placing high demand items at each end of the department.

REQUIREMENT. Exercises 31 through 39 are matching exercises. Column I is a list of perishable food items. Column II lists the proper storage temperatures for perishable subsistence. Select the storage temperature in column II for each food item listed in column I, and indicate your answer on the answer form. The choices in column II may be used once, more than once, or not at all.

Column I	Column II
31. Lettuce.	a. 50° F.
32. Tomatoes.	b. 35° F.
33. Eggs.	c. 32° F.
34. Fruit juices, frozen.	d. 30° F.
35. Cantaloups.	e. 0° F.
36. Cheese.	
37. Chilled meats and meat products.	
38. Broccoli.	
39. Fish and water foods, frozen.	

REQUIREMENT. Exercises 40 through 50 are true-false. Indicate your answer on the answer form by using A for TRUE and B for FALSE.

40. An officer or a department of the Army civilian who is qualified by training and experience may be appointed as commissary officer.

41. Commissary stores have a greater requirement for storage space than commercial supermarkets.

42. The item selection board is designed to provide the best possible selection of items for the commissary store.

43. A combination of appropriated nonreimbursable and reimbursable funds may be used for commissary store improvement projects.

44. The commissary officer is responsible for the sanitary control of all foods and beverages served or dispensed on military installations.

45. The commissary officer should insure that heavy objects are lifted by mechanical means whenever possible.

46. Requirements for items procured on a charge account basis are determined by the commissary store manager.

47. Prices may be equalized among several brands or sizes of the same item by establishing an average price for all items involved.

48. Commissary prices are verified each month to insure that they conform to local market prices.

49. The cubic feet of frozen foods capacity per square foot of floor space can be increased by using vertical freezers.

50. Dairy display cases in many commissary stores are stocked by the supplier's driver or salesman.

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SLAB 387B

Single-Lesson Assignment Booklet:

COMMISSARY STORE MEAT MARKET OPERATIONS

This copy is a reprint which includes Change No. 1, dated June 1973.

U.S. ARMY QUARTERMASTER SCHOOL
FORT LEE, VIRGINIA

SUPPLY TRAINING CENTER OF THE ARMY SCHOOL SYSTEM

JANUARY 1972
(Reprint (A), April 1975)

Army-Fort Lee, Va.-4237-75-850-4

SLAB 387B Credit Hours: 3

LESSON ASSIGNMENT

SUBJECT	Commissary Store Meat Market Operations.
STUDY ASSIGNMENT	Lesson Text.
SCOPE	Meat market sales space allocation and display methods, techniques, price changes, and merchandising principles; processing and storage of variety meats; frozen boneless beef, including shrinkage, storage temperatures, and thawing procedures.
OBJECTIVES	As a result of successful completion of this assignment, the student will be able to--

1. Determine the location and layout of the meat market and types of meat market service provided in the commissary stores.
2. Explain the allocation of sales space in the meat market according to the MIX method and define the CARCASS and COOKING methods of meat display.
3. Determine required price changes based on weekly operations records and analysis of cutting tests.
4. List and explain important techniques of effective meat market merchandising.
5. Explain the procedures for merchandising carcass meats and state the purpose for each procedure.
6. Identify the variety meats and determine processing required for each.

7. Specify the proper storage procedures for variety meats.

8. List the categories of frozen boneless beef and indicate the percentage of each category included.

9. Indicate the proper storage temperature and outline thawing procedures for frozen boneless beef.

10. Give the procedures for pricing and merchandising preprocessed beef.

LESSON TEXT

SECTION I

INTRODUCTION

1. GENERAL. The meat market accounts for approximately 25 percent of the total sales volume in the commissary store; therefore, the importance of this department of the overall planning of commissary store operations is readily apparent. Many homemakers plan their entire menu around the meat cuts available where they shop. If a customer is pleased with the selection and quality of meats offered by the meat market, he is usually satisfied with the other departments of the store. A well-planned meat market offering ample supplies and an effective display of quality meats at reasonable prices provides the commissary store with the opportunity to build customer loyalty and create a distinctive store image.

2. TYPE OF SERVICE. The type of service provided in the commissary store meat market depends upon the class of the commissary store. The class of the store is based on the volume of monthly sales, the availability of equipment and personnel, and the requirements of the installation. The three types of meat markets authorized for commissary stores are as follows:

a. One-hundred-percent patron self-service. In this type of meat market, the entire operation is self-service. The patron selects from preweighed, prepackaged, and prepriced meat items displayed in open refrigerated cases (fig. 1). Meats which are not displayed because of limited patron demand may be prepared for patrons upon request. One-hundred-percent patron self-service meat markets are authorized for class 3 or above commissary stores.

b. Combination clerk-service and patron self-service. This type of meat market operation is authorized for class 2 commissary stores. Upon request, meat items are processed, weighed, wrapped, and priced by meat market personnel. In addition, vendor prepackaged items and fast-moving meat items prepackaged by meat market personnel are displayed for patron self-service.

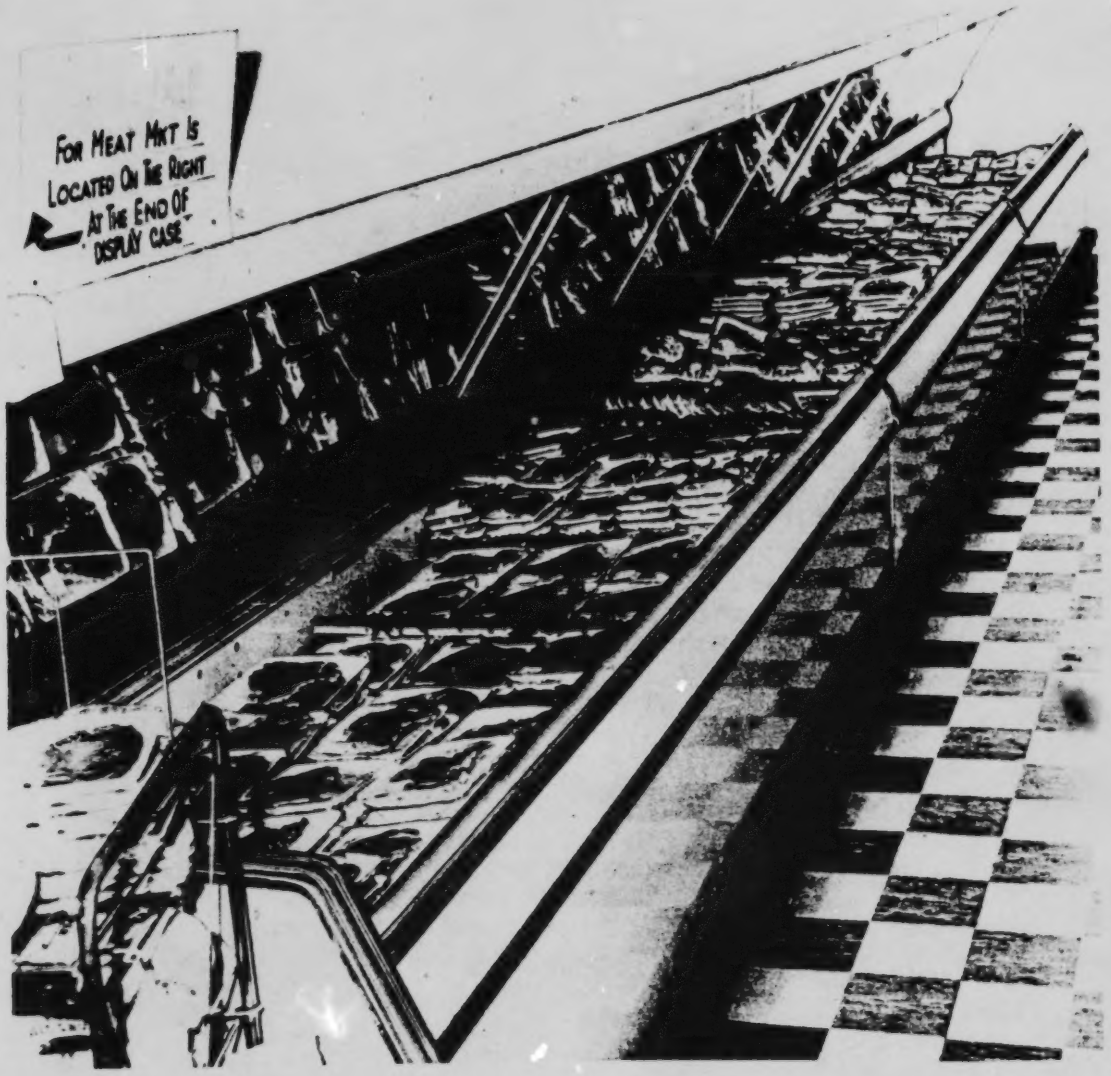


Figure 1. Prepackaged meat items displayed in open refrigerated cases.

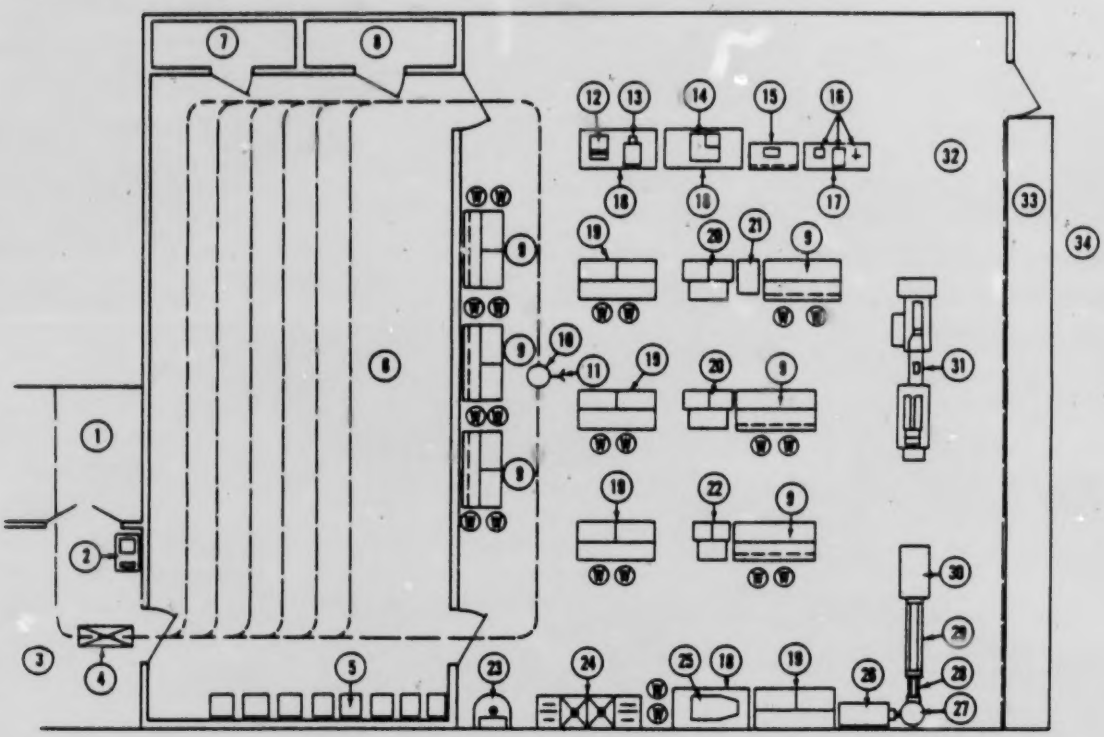
c. Clerk-service. In clerk-service meat markets, the patron selects from meat cuts displayed in refrigerated cases. The meat selected is then processed, weighed, wrapped, and priced by meat market personnel. This type of meat market is authorized for all class 1 commissary stores within CONUS. In oversea commands, class 1 stores may be either clerk-service or patron self-service, as determined by the major commander.

3. LOCATION AND LAYOUT. Because the meat market is important to both the commissary store and the patron, the location and layout should be planned to provide maximum convenience to the patron and to allow the largest possible sales volume.

a. Location. When the location of the meat market is planned, full advantage should be made of the building design to achieve a smooth traffic flow from the receiving and storage areas, through the processing and packaging areas, to the retail sales area with a minimum of time and effort. Primary consideration should also be given to customer convenience and store traffic patterns. Traditionally, the meat market is located across the back of the store. This arrangement permits the patron to move directly to the meat market by the aisles on each side of the store and after selecting meat purchases, proceed on through the other departments of the store. In some of the new stores, the meat market is located along the side of the store with the incoming flow of traffic. This allows the customer to shop the meat market first and then to select items in the other departments to go with the meat purchase. In a few instances, where building design and traffic patterns permit, the meat market may be located in the center of the store. This location provides a central hub around which shoppers may plan their purchases. Each of these locations has certain advantages in terms of customer convenience and store traffic patterns, and they should be carefully considered in planning the location of the meat market.

b. Layout. The physical layout of the meat market (fig. 2) depends on the type of service provided, the location of the market, and the amount of floor space allocated. The bulk storage and processing areas should be located adjacent to or within convenient access of the retail sales area.

(1) Bulk storage area. The layout of the bulk storage area should provide an allotted space for each type of meat, such as beef, pork, lamb, and poultry. Meat items



1 Covered platform
2 Portable beam and dial scale
3 Receiving room
4 Cantilever beam and dial scale
5 Delivery and storage racks
6 Meat chill refrigerator
7 Poultry chill refrigerator
8 Smoked meat chill refrigerator
9 Boning and trimming table with undershelf and backsplash
10 Extension cord reel
11 Electric meat-cutting hand saw
12 Electric meat tenderizer
13 Table-type electric meat grinder
14 Table-type electric meat slicer
15 Handwrap station with hotplate
16 Prepackaged-food scale with label printer and activator
17 Weighing and labeling table
18 Food preparation table
19 Boning and trimming table with undershelf
20 Heavy-duty electric bandsaw
21 Portable bone dust removing machine
22 Standard electric bandsaw
23 Handwashing facility
24 Two-compartment sink
25 Stretch-net tying machine
26 Floor-type electric meat grinder
27 Electric meat mixing and grinding machine
28 Electric meat molding machine
29 Portable electric conveyor
30 Food preparation table (modified rubber composition top)
31 Automatic wrapping, shrinking, conveying, weighing, and labeling machine
32 Meat processing room
33 Refrigerated display cases
34 Sales area
Waste cans

Figure 2. Floor plan of meat market layout.

should be stored in allotted spaces and to insure proper rotation, the freshest, or those just received, should be placed at the rear of the allotted space and the older portions at the front, or closer to the front door. This arrangement should eliminate confusion in locating items and allow a smooth flow of merchandise from the storage area to the processing area with a minimum of time and effort. Carcass meats should be stored on hooks, and the hooks arranged so that the meat will receive full refrigeration (fig. 3).

(2) Processing area. The processing area should be arranged to permit a straight-line workflow from right to left to avoid or minimize backtracking. Temperatures in the processing area should be maintained between 50° and 55° F., and the airflow should be controlled by louvers to eliminate direct drafts on employees and work areas. Temperatures should be checked three times a day. The meat-cutting blocks should be conveniently located along the workflow line and power saws should be installed nearby. A rail system should be designed to move heavy cuts to the blocks, making the stock easily accessible to the meatcutters. Cubing and grinding machines should be located near the wrapping area, and a sink should be accessible to all meatcutters. The weight scales and the wrapping and pricing equipment complete the processing line and should be located near the retail sales area.

(3) Retail sales area. The retail sales area should have an adequate amount of display equipment, and it should be arranged to simplify the selection of merchandise and to facilitate customer traffic. Display cases should be located near the cutting and wrapping area and away from drafty or dusty areas. The arrangement of display cases should be convenient for both selling and stocking. Considerably more display case space is required for a one-hundred-percent patron self-service operation than for a semi-self-service or clerk-service operation. However, the one-hundred-percent in patron self-service operation is used in most commissary stores today. A widely used layout for the self-service meat market is a long straight line of display cases across the back or along the side of the store. This arrangement discourages back and forth shopping and serves to remind patrons of other meat items as they pass near the meat cases while shopping the grocery department. Because of the closeness of the departments, some traffic problems may occur between the grocery department and meat market shoppers. With careful planning, other layouts may be designed to improve traffic flow and customer convenience.

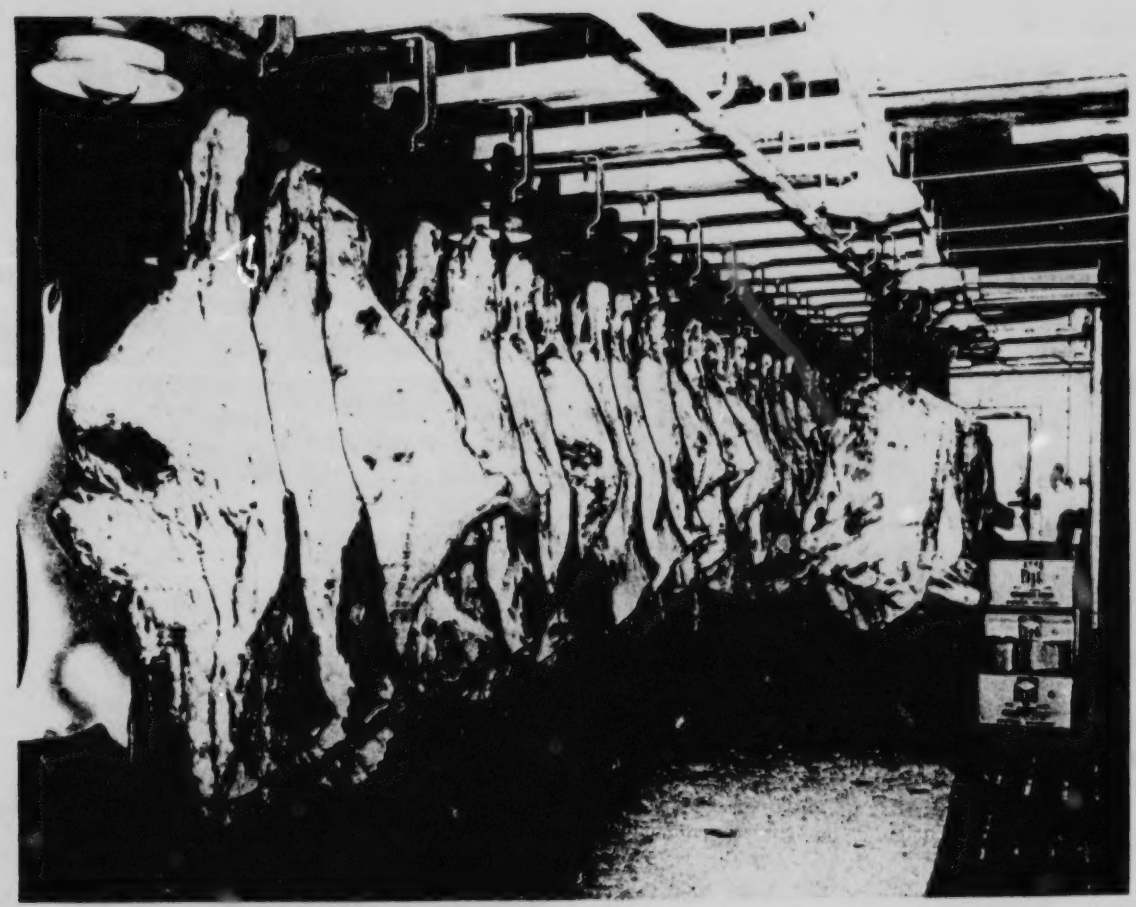


Figure 3. Bulk storage area with carcass meats stored on hooks.

c. Sales space allocation. The allocation of sales space in the commissary store meat market is determined by the meat market "mix." The meat market "mix" is the aggregate of all types and cuts of meat sold in the meat market. Space allocations for meat items are based on past sales volume records for each type and cut of meat sold.

(1) Meat market mix. The meat market mix varies according to consumer preference. Factors such as locality, holiday customs, type and number of customers, season of year, availability of product, and prices determine the kinds of meat purchased by the consumer. Considering these factors and past sales volume records, the meat market manager can determine the proper mix of meat items to be sold in the meat market. The meat market mix should be planned to offer patrons the highest quality meats at the lowest possible prices.

(2) Allocating sales space. To determine the space allocation for each type and cut of meat sold in the meat market, the meat market manager must analyze past sales volume records and compute the percentage of total sales for each meat item sold. Sales space is allocated for each type and cut of meat according to the percentage of total sales for that item.

4. PERSONNEL. Because meat is an important commodity and the processed items have a high value, care and good judgment must be constantly exercised to avoid costly cutting errors which reduce the retail value of the processed meat. Both skilled and semiskilled personnel are required for meat market operations, the number of each depending on the size of the department and the type of service provided.

a. Meat market manager. The meat market manager is responsible to the commissary store manager for the successful and efficient operation of the meat department. The responsibilities of the meat market manager are numerous and varied and include planning, organizing, directing, coordinating, and controlling the activities of the meat department. In fulfilling these responsibilities, the meat market manager performs the following duties:

(1) Insures that supplies of processed meats are adequate to meet patron demands.

(2) Supervise the cutting, processing, packaging, displaying, and merchandising of meats.

(3) Establishes training programs for both new and experienced personnel on a continuous basis because of frequent new cutting tests and changing customer demands.

(4) Establishes and adjusts prices of processed meats based on cutting tests and operations records.

(5) Insures the constant replenishment of supplies from the storage area.

(6) Directs and plans all operations of the department and sets up production schedules.

b. Assistant meat manager. Because of the size and importance of the meat market and the numerous operations which require proficient management, the meat market manager must frequently delegate certain responsibilities to his assistant. The assistant meat manager may be responsible for ordering and receiving or packaging and pricing operations. In addition, he assists the meat market manager in the overall management of the market and is responsible for the efficient operation of the market in the absence of the manager.

c. Meatcutters. Meat cutting is a highly skilled profession requiring exacting standards and technical knowledge. The meatcutters are responsible for processing carcass and wholesale cuts of meat into retail cuts demanded by patrons. New cutting tests are constantly performed by the meatcutters to reflect customer demands and to establish costs of processed meats. Meatcutter helpers assist the cutters in processing meats, performing semiskilled tasks such as trimming and meat grinding. New or inexperienced meatcutters begin with the simple cuts and through a continuous program of on-the-job training become proficient in handling the most complex cuts of meat.

d. Semiskilled personnel. The weighing, wrapping, and pricing operations are performed by semiskilled personnel who prepare the processed meats for display in the retail sales area. These workers also replenish stocks in the display cases, prepare displays, and perform general housekeeping duties.

5. INSPECTION AND GRADES OF FRESH MEAT. All meat and meat products sold in Army commissary stores must be procured from establishments operating under the supervision of the U.S. Department of Agriculture (USDA). In addition to establishing Federal inspection standards, the USDA establishes styles, classes, grades, and cutability standards for meat.

a. Federal meat inspection. Federal law requires that all meat packing plants processing meats for sale and shipment through interstate commerce must operate under Federal inspection. All animals slaughtered and processed within these plants are inspected by veterinary personnel of the USDA.

(1) Purpose of inspection. The primary purpose of Federal meat inspection is to protect the consumer by insuring that meat items are from healthy animals and that the animals are slaughtered and processed under sanitary conditions. All meat inspected and passed by Federal inspectors is suitable for human consumption when it leaves the processing plant.

(2) Inspection stamps. All meat and meat products that pass Federal inspection are marked with the Federal inspection stamp (INSP'D & P'S'D), indicating that the meat has been inspected and passed. A number which appears at the top of the stamp is the official number assigned to the meat packing plant that slaughtered and processed the meat. Marking fluid used for meat stamping is harmless vegetable coloring and need not be trimmed from the meat.

b. Grades of fresh meat. Meat grading is a method of describing the quality of meat as it is inspected. Meat is graded by subjective evaluation rather than exact science; however, two primary factors used as yardsticks in grading meats can be evaluated visually. These two factors are conformation and quality. Conformation refers to the general form, shape, or outline of the carcass which is determined genetically. Crossbreeding and interbreeding have changed the physical characteristics of cattle so that there is substantial variation among the breeds. Superior conformation implies thick backs with full loins and ribs, deep plump rounds, thick shoulders, and short necks and shanks. Quality refers to those characteristics associated with palatability, that is, tenderness, juiciness, and flavor. Quality evaluation is based on maturity, marbling, color, firmness, and texture. The maturity of a carcass is determined by the characteristics of the skeleton, particularly the ossification of the cartilage on the end of the featherbone. The color and texture of the lean meat also indicate maturity. Increasing maturity is associated with decreasing tenderness. Marbling refers to flecks of fat in lean meat. It is an important factor in meat quality because it enhances juiciness,

flavor, and tenderness. The color, firmness, and texture of the lean also affect the quality of the meat Bright colored, firm, fine textured lean is associated with high quality meat. Although conformation and quality are criteria used in grading beef, veal, pork, and lamb carcasses, the relative weight of these two factors varies for each type of meat. Table 1 indicates comparable USDA grades for veal, lamb, and pork.

Table 1. USDA meat grades

Beef	Veal	Lamb	Pork
Prime	Prime	Prime	U.S. No. 1
Choice	Choice	Choice	U.S. No. 2
Good	Good	Good	U.S. No. 3
Standard	Standard	Utility	U.S. No. 4
Commercial	Utility	Cull	Utility
Utility	Cull		
Cutter			
Canner			

(1) USDA beef grades. Although not required by law, meats inspected by the USDA are graded in descending order of their quality. Beef grades established by the USDA are Prime, Choice, Good, Standard, Commercial, or Utility. All meat grades, however, are not established by the USDA. Many meat packers use their own grading systems to denote the quality of their meats. For example, Star, Premium, and Pride denote top quality meats.

(a) Prime. Carcasses or wholesale cuts with prime conformation are thickly muscled throughout and tend to be very wide and thick in relation to their length. Loins and ribs tend to be thick and full. Rounds are plump and extend well down towards the hocks. The chucks are thick,

and the necks and shanks tend to be short. Prime quality is indicated by slightly red and very soft chine bones with some evidence of ossification of the cartilage at the ends of the thoracic vertebrae. Rib bones are slightly wide and flat, and the rib-eye muscle is light red, fine textured, and moderately firm. The degree of marbling is usually abundant. Beef produced from steers or heifers only is eligible for the Prime grade.

(b) Choice. Average choice conformation is evidenced by moderately plump round and moderately thick loins, ribs, and chuck. The rib-eye muscle of a typical mature choice carcass has a weak moderate amount of marbling and slightly firm lean.

(c) Good. The average good conformation shows slightly plump rounds and slightly thick and full loins, ribs, and chuck. Average good quality for a very young carcass shows a distinct separation of the sacral vertebrae, red porous chine bones, and a very light red lean. A slight amount of marbling is evident in the moderately soft rib-eye muscle.

(d) Standard. The conformation of standard grade beef is slightly thin-fleshed throughout. In quality, the rib-eye muscle is moderately soft and has only traces of marbling.

(e) Commercial. In conformation, commercial beef has thin rounds with loins slightly sunken and moderately wide. The ribs and chucks are slightly thick. Hard-boned skeleton, with chine-bone cartilages that are completely ossified and flinty, indicates commercial quality. The rib-eye muscle is dark red and course textured, with a moderately abundant amount of marbling.

(f) Utility. Utility grade beef has slightly concave rounds, thin sunken loins, and flat, thin-fleshed ribs. The bones are hard and the cartilages ossified. There is a moderate amount of marbling in the dark red, course-textured lean.

(g) Cutter and canner. These bottom two grades are characterized by carcasses that are extremely mature. Their conformation is deficient in every respect and quality is lacking.

(2) USDA grade stamps. The grade of meats processed under USDA inspection is marked on each carcass or wholesale cut with a rolling stamp. This process makes a line of stamp marks along the entire length of the piece of meat. Each stamp in the line of marks carries the initials USDA and the grade assigned to the meat.

c. Cutability standards. The cutability or yield grade of meat items indicates the percent of trimmed, boneless, major retail cuts that can be derived from a carcass. The USDA has established five yield or cutability grades for carcass beef. Yield grade 1 has the highest yield of retail cuts to weight, and yield grade 5 has the lowest.

(1) Beef cutability grading. The cutability grade of beef is determined by a composite evaluation of the following four characteristics of the carcass: the amount of external fat; the amount of kidney, pelvic, and heart fat; the area of the rib-eye muscle; and the hot carcass weight.

(a) External fat. The amount of external fat on a carcass is evaluated in terms of the thickness of the fat over the rib-eye muscle. The fat is measured at a point three-fourths of the length of the rib-eye from its chine-bone end. This measurement may be adjusted, as necessary, to reflect unusual amounts of fat on other parts of the carcass.

(b) Kidney, pelvic, and heart fat. The amount of kidney, heart, and pelvic fat considered in determining cutability grade includes the kidney knob (kidney and its surrounding fat), the lumbar and pelvic fat in the loin and round, and the heart fat in the chuck and brisket areas. Excess fat in these areas decreases the yield of retail cuts.

(c) Area of rib-eye. The area of the rib-eye muscle is determined where the muscle is exposed by ribbing. The measurement may be made with a grid calibrated in tenths of square inches, by other devices, or it may be estimated subjectively.

(d) Hot carcass weight. The hot carcass weight refers to the weight of the carcass immediately after it is slaughtered and dressed and before it is chilled. Increased carcass weight decreases the yield of retail cuts from the carcass. A difference of 100 pounds in hot carcass weight can change the cutability grade by as much as 40 percent of a grade.

(2) Cutability grade stamps. Each beef carcass inspected and passed by the USDA is stamped with a cutability stamp indicating the cutability yield grade assigned by the USDA for that particular carcass. The stamp carries the initials USDA and a numerical rating from 1 to 5 to indicate the cutability yield grade assigned to the carcass.

6. MERCHANDISING. Merchandising is a broad term which may be used to describe many different activities concerned with selling merchandise. Effective merchandising techniques that may be applied in the processing and merchandising of fresh meats are as follows:

a. Cutting. Meat cutting plays a vital role in the effective merchandising of fresh meats. Cutting operations should be designed to

(1) produce attractive cuts of meat.

(2) increase the sales appeal.

(3) increase the sales value of the cuts produced.

(4) produce the maximum number of cuts that have the greatest demand.

(5) satisfy the needs and desires of the customer.

b. Grading. Retail cuts of meat produced from carcass or wholesale cuts should be graded according to their sales value. Center or more choice cuts should be graded higher than the end or less desirable cuts. Proper grading of retail meat cuts is important to meat market merchandising.

c. Pricing. Attractive meat cuts must be priced higher than those less attractive to equalize sales and insure a prompt turnover of all cuts. Fair and equitable pricing insures full dollar value and builds good will with customers.

d. Wrapping. Wrapping and packaging of fresh meats is one of the most effective merchandising tools available to the meat market. Proper packaging of retail meat cuts should include

(1) eye appeal.

(2) the use of proper size trays and wrapping materials.

(3) an indication of cooking methods for steaks, chops, and roasts.

(4) accurate representation of package contents.

(5) price tag description indicating the type of cut, price per pound, and total price of package; the USDA grade of the meat; and the weight in pounds and ounces.

(6) treated paper between layers to prevent shrinkage and to retain color.

(7) effective display of packages by the carcass or cooking methods of display.

e. Display. One of the most important aspects of meat market merchandising is an attractive and effective display of merchandise. Since most commissary store meat markets are self-service, display becomes doubly important because the display, in effect, is the salesman. There are many different approaches to the proper display of meats in the meat market. Some of the most effective methods and techniques are as follows:

(1) Cooking method. In the cooking method of display, meat cuts are arranged and displayed according to their method of preparation (fig. 4). This type of display is designed to remind the patron of other cuts of meat that may be substituted or prepared in the same manner. Groupings in the cooking method of display include the following:

(a) Broiling cuts. The display of broiling meats includes steaks, chops, ham slices, chicken parts, whole broilers, and ground meats.

(b) Braising meats. Meats for braising include round steaks, swiss steaks, stew meats, and stewing hens.

(c) Roasts. Meats for roasting include rib roasts, roasts of beef, leg of lamb, pork roasts, hens, turkeys, and hams.

(d) Pot roasts. Chuck roasts, heel of round, brisket, and plate beef are included in the pot roast display.

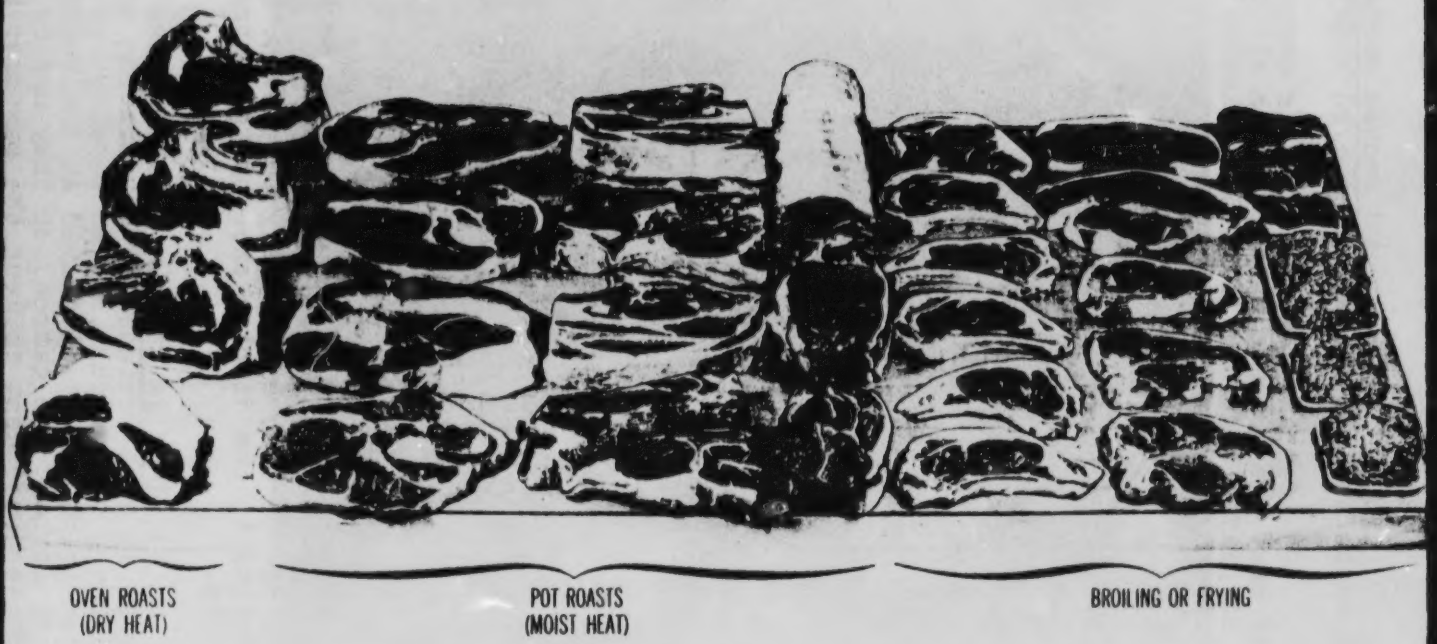


Figure 4. Meat items displayed by the cooking method.

(e) Luncheon and smoked meats. Luncheon and smoked meats are grouped and displayed together.

(2) Carcass method. In this method of display, the cuts of meat are grouped by type, with all the cuts of each type displayed together (fig. 5). Display groupings in the carcass method are as follows:

(a) Beef. Retail cuts of beef such as steaks, roasts, tenderloin, pot roasts, ground chuck, and ground beef are included in the beef display.

(b) Pork. The display of pork includes chops, roasts, loins, shoulders, ribs, and hams.

(c) Veal. The retail cuts of veal displayed together include steaks (cutlets), chops, roasts, stew, and ground veal.

(d) Lamb. The lamb display includes steaks, chops, roasts, stew, and lamb patties.

(e) Poultry. The display of poultry includes fryers, broilers, roasters, fowl, and turkeys. Fryers should be displayed in a variety of cuts such as quarters, chicken parts, cut-up fryers, or whole fryers.

(f) Variety meats. Variety meats for beef, veal, lamb, and pork are displayed together and include hearts, kidneys, brains, tongues, liver, and sweetbreads.

(g) Luncheon and smoked meats. Luncheon and smoked meats are displayed together and may be sold by the piece, whole, or sliced.

(3) Color combinations. Meat displays may be arranged in color combinations to add eye appeal to the display case. White meats such as chickens or turkeys may be interspersed between red cuts of beef and lamb. Such an arrangement may be used effectively to prevent unfavorable color contrasts in the display case or to contrast special feature items.

(4) Impulse items. Impulse items in the meat market may serve as a reminder of an existing need, a suggestion to try a new product, or an impulse for a convenience item. These items may be displayed at the beginning of the department to attract the patron, or they may be scattered throughout the department to keep the customer progressing through the department.

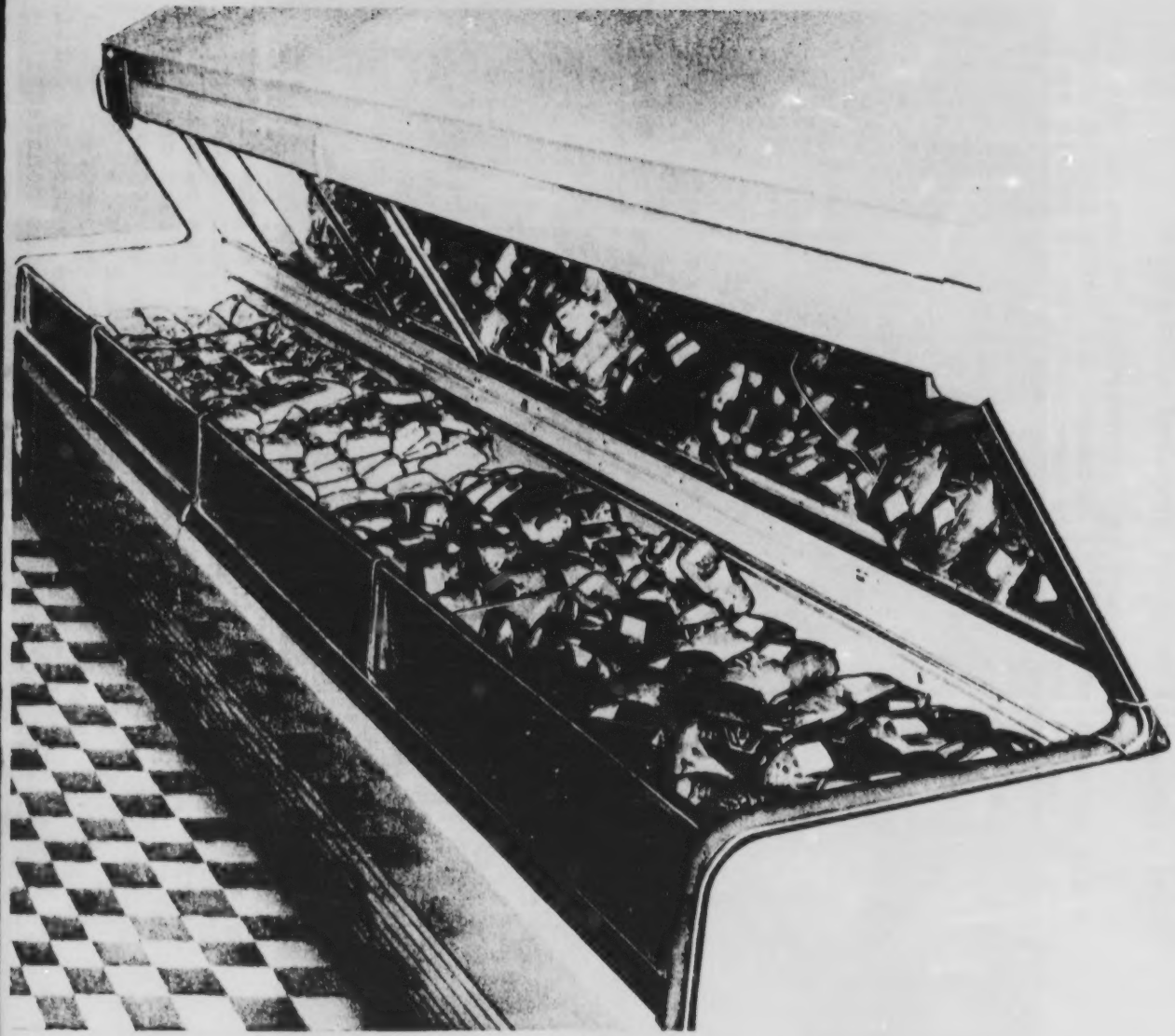


Figure 5. Meat items displayed by the carcass method.

(5) Service section. The service section is often located at the end of the department to encourage full department shopping. Meats are displayed in closed refrigerated cases, and cuts are prepared as demanded.

(6) Converting. Converting refers to the continuing process of checking packages and replenishing display cases to insure the effective merchandising of retail meat cuts. Display cases should be checked frequently for

(a) broken packages, discolored meats, and freshness of stock.

(b) cuts which may be reworked to recover costs.

(c) slow moving items that may be merchandised another way.

(d) ample supply of fresh retail cuts.

7. ESTABLISHING SALES PRICES. Factors such as patron demand, quality and grade of cut, standardized cutting procedures, percentage yield, and balanced movement of processed cuts are considered in determining selling prices for processed meats. Unprocessed items, sold in the form originally received, are priced as listed in the established commissary pricelist. Items processed by the meat market are priced to recover the cost of the item processed.

a. Cutting tests. Cutting tests are the basic requirements for establishing prices of meats in the commissary store. These tests are required at least once each month for items subject to processing losses and for items for which pricing charts have not been developed. The same cutting and trimming method should be used for all cutting tests, including carcass and wholesale cuts. Pricing guides should be based on the newest tests conducted; previous tests should be used for guidance only. Because of the differences in weight, grade, conformation, bone structure, and trim required, tests should be performed on various carcass weights and wholesale cuts. The percentage yield of each meat cut, determined from accumulated cutting tests, is applied to a given weight of carcass, side, or wholesale cut to secure the average weights of the meat cuts. The percentage yield of cuts will remain the same so long as the method of cutting is not changed and the quality or grade remains constant.

Deviations from the usual cutting method are permitted to provide cuts for patron demand. Meat-cutting tests are recorded on DA Form 10-253 (Processed Item Test) and are retained by the meat market manager for future reference. Consistent cutting tests provide the following data which are used to determine the retail price of the cuts generated:

(1) The amount in pounds of each cut.

(2) The amount in pounds of fat, bone, and inedible trimmings.

(3) The amount in pounds of shrinkage (difference between tag weight and actual weight of the meat carcass or wholesale cut before processing).

(4) The amount in pounds of cutting loss (difference between the actual weight of the carcass or wholesale cut and the sum of the weights of the salable cuts, fat, bone, and inedible trimmings).

(5) The percent yield of the meat cuts when compared to the weight of the carcass or wholesale cut.

b. Pricing charts. Pricing charts were developed to eliminate repetitive cutting tests on fast moving items such as beef, veal, lamb, pork, and ham cuts. Prices indicated in the pricing charts were established from a series of cutting tests conducted to determine the average yield of cuts from beef and lamb carcasses, veal sides, pork loins, and smoked hams when standard cutting methods were used. The prices listed are in accordance with good commercial pricing practices and will permit a monetary return approximately equal to the cost of the carcass, side, or wholesale cut processed.

(1) Use of pricing charts. Pricing charts may be used, instead of performing cutting tests, when meat items are processed in the types, grades, and weight ranges indicated on the charts and when the items are cut by standard cutting methods. The suggested price for various cuts may be found in the applicable pricing chart by locating the top line of figures (item price per pound to the meat market). The figures in the column under this price per pound are the suggested retail prices for the cuts listed at the left of the chart. These prices apply when the meat cuts are produced according to standard cutting procedures. Pricing charts have

been developed for the following types and weight ranges of meats and may be effectively used in commissary stores processing these items.

(a) 500- to 700-pound beef carcasses of quality grade B (USDA Choice) or grade C (USDA Good).

(b) 40- to 55-pound lamb carcasses of quality grade B (USDA Choice).

(c) 60- to 75-pound veal sides of quality grade B (USDA Choice).

(d) 8- to 16-pound pork loins graded U.S. No. 1, style B (market cuts).

(e) 10- to 18-pound smoked (cured) hams, commercially prepared (skinned, short shank). Where a different weight range, grade, or type is used, the pricing chart may be used to determine the proper relationships between the prices of the different cuts.

(2) Use of cutting tests. Prices for meat items of grades or weight ranges which differ from those in the pricing charts and items such as bulk luncheon meats, cheese, fresh poultry, canned meats (sliced), and slab bacon (sliced) are determined by conducting monthly cutting tests. Cutting tests should be conducted on several items of the same type and grade to obtain an average percentage yield. The results of these tests, including the prices established for the cuts produced, are recorded on DA Form 10-253 and retained on file in the meat market for future reference.

c. Pricelist. The meat market pricelist is prepared by the commissary officer for each accounting period. It reflects the prices for all processed items sold in the commissary store meat market. In preparing the meat market pricelist, the commissary officer must consider patron demand, an analysis of DA Form 10-254 (Weekly Record of (Meat Market) Operations), pricing charts, and cutting tests performed in the meat market. Blank columns should be provided for entering price changes so that the pricelist may be kept up to date. Also, blank lines between grouped items should be provided for the addition of special cuts required by recurring patron, local, or seasonal demand. The meat market pricelist is reproduced locally, and a copy is forwarded with the commissary pricelist to the U.S. Army Food Service Center. At the end of the accounting period, pricelists are filed as a part of the commissary officer's account.

(1) Pricing board. In clerk-service operations and in the service section of patron self-service meat markets, a pricing board should be installed in the sales area to inform patrons of current prices. Prices listed should be limited to those items which are not prepackaged.

(2) Label identification. Label identification of instore packaged processed meats should include the type of cut, price, and USDA grade, except for pork items (fresh, cured, or smoked). When more than one grade of an item is displayed for sale, the item will be identified and priced separately according to grade.

d. Adjusting prices. Prices in the meat market must be adjusted periodically to compensate for any gain or loss resulting from the overall operation of the meat market. Because the nature of meat market operations prevents exact pricing, gains or losses may occur during a specific accounting period. To permit flexibility in the operation of the meat market, a 1.5-percent gain or loss tolerance is authorized during each accounting period. For effective control of gains or losses, trial balances of meat market operations should be taken weekly or more often if required. Analysis of meat market operations are tabulated on DA Form 10-254 (Weekly Record of (Meat Market) Operations). Prices in the meat market should be adjusted as often as required to prevent gains or losses or to compensate for any gain or loss carried forward from the previous accounting period. Prices of one type of processed meat may not be used to offset a gain or loss on another type of meat. For example, beef prices may not be raised to offset losses on the sale of lamb.

SECTION II

OPERATING PROCEDURES

8. PLANNING OPERATIONS. The meat market manager is responsible for planning the operations of the commissary store meat market. Since most of the products sold in the meat market must be processed into salable cuts before they can be merchandised, the meat market is essentially both a manufacturing and a retail sales operation. When meat market operations are planned, constant coordination is required in all phases of the operation to achieve a smooth flow of work and to avoid delays resulting in wasted man-hours. Factors such as meat delivery dates, employee days off, special holidays, processing time required, and display case life must be incorporated into effective planning for meat market operations.

a. Sales planning. In planning the operations of the retail sales area, the meat market manager must determine the most popular mix of items to be sold in the department. The meat market mix is based on the results of cutting tests, on past sales volumes for each type and cut, and on customer requests and complaints. Consideration must be given to the display space available in the retail sales area and the display methods (carcass or cooking) to be used. Retail sales planning should also include feature or promotional items and those items available only during seasonal periods. Effective planning of retail sales provides a basis for determining the overall meat requirements for the meat market.

b. Meat market requirements. Requirements for authorized meat items to be sold in the meat market are based on demand experience, storage and display life, available storage space, frequency of delivery, and stocks on hand. Demand records should be maintained by the meat market manager for normal business weeks and for holiday weeks such as Thanksgiving, Christmas, and Easter. Because of the high demand for such items as turkey or ham during holiday periods, analysis should be made of sales volumes for the current and previous years, and quantities of other meat items should be reduced from amounts required during a normal business week.

c. Processing operations. Effective coordination and scheduling of processing operations in the meat market are essential to prevent delays and permit the timely accomplishment of all phases of the meat market operation.

The breakdown of carcass meats into primal cuts should be scheduled to provide adequate supplies to the meatcutters processing retail cuts. Packaging and pricing operations should be geared to the production of retail cuts and coordinated with the requirements in the retail sales area.

9. ORDERING FRESH MEATS. Requirements for authorized items to be sold in the meat market are determined by the meat market manager and forwarded to the commissary officer through the commissary store manager. Requirements must be projected far enough in advance to allow the commissary officer to requisition the meat for delivery on the scheduled delivery date. Close coordination between the meat market manager and the commissary officer is required so that special or unexpected needs can be procured from the regional headquarters of the Defense Personnel Support Center (DPSC).

a. Items authorized for stockage. Items authorized for stockage and sale in the meat market are listed in Army regulations and include carcass and wholesale cuts requiring processing, bulk items which are normally sliced or cut and packaged in the meat market, and vendor-processed and packaged meats, poultry, seafood, and cheese items. In addition, when stocked, the following items are sold in the meat market:

(1) Chilled poultry, whole, cut-up, or parts.

(2) Cheeses, cut from bulk pieces (e.g. horns, wheels, or loaves) which are packaged and priced in the meat market.

(3) Smoked meats such as hams (whole or halves), picnics (pork shoulders), pork butts, Canadian bacon (unsliced), tongues, pork loins and pork shanks or hocks.

(4) Canned hams which require refrigeration.

(5) Fresh or frozen livers, tongues, and hearts.

(6) Poultry, whole frozen, including specification and brand-name chickens, turkeys, ducks, geese, capons, and cornish hens.

(7) Vendor-packaged chilled meats received in frozen condition may be stocked in overseas meat markets.

b. Requisitioning procedures. Meat market requirements are submitted by the meat market manager on a schedule based on the requisition or procurement time required. Normally, requisitions must be submitted to DPSC from 45 to 60 days before the initial delivery date. If supplies are to be purchased locally, requirements are submitted from 1 to 7 days in advance.

(1) Supplies requisitioned from DPSC. Meat market requirements to be requisitioned from DPSC are based on a twice-weekly delivery schedule and are consolidated with troop-issue and produce market requirements. The consolidated requisition is prepared in the commissary office and submitted to DPSC through the commissary officer. When requirements cannot be met by DPSC on the required date, notification will be made in sufficient time to permit the commissary officer to effect local procurement.

(2) Local procurement. Requirements for meat items which are normally procured locally are forwarded to the commissary office in sufficient time to allow for timely procurement. The required procurement documents are prepared in the commissary office and submitted to the commissary officer for procurement by local purchase.

10. RECEIVING MEAT SUPPLIES. Meat supplies requisitioned from DPSC are usually delivered to the commissary cold storage warehouse and transferred to the meat market as required. Locally procured items for the meat market are delivered directly to the meat market.

a. Receiving supplies from warehouse stocks. Meat supplies are transferred from warehouse stocks to the meat market at the same weight as originally received by the commissary officer. DA Form 3161 (Request for Issue or Turn-In), which is used to make the transfer, is prepared by the meat market manager. The original copy of the form is forwarded to the accounting section of the commissary office for monetary transfer from the perishable issue section to the commissary store meat market section of the commissary account. The commissary officer may not transfer from issue stocks to the meat market for resale select or preferred items which result in a reduction in the quality of meat supplies remaining on hand for issue purposes.

b. Receiving supplies directly from vendor. Supplies received directly by the meat market are not processed through other sections of the commissary account. The meat market manager tallies in the supplies and forwards a copy

of the tally to the accounting section of the commissary office. The receiving document is prepared by the accounting section for payment to the vendor, and the meat market section of the commissary account is debited for the supplies received.

c. Inspecting meat supplies. All meat items are inspected upon receipt by installation veterinary personnel. In the absence of veterinary personnel, the inspection is conducted by personnel under the supervision of the installation surgeon.

(1) Deliveries directly from the vendor. Meat items received by the meat market directly from the vendor must be inspected by installation veterinary personnel. The items are inspected for condition and quantity, and to the extent provided for in contracts, for quality.

(2) Deliveries from warehouse stocks. Meat items transferred to the meat market from warehouse stocks are inspected by meat market personnel for quality, condition, and quantity. When the condition of an item is questionable, the item is set aside until it is inspected by the installation veterinary officer or the installation surgeon.

d. Handling meat supplies. Preparations for receiving meat supplies at the meat market should be made well in advance of delivery dates. An efficient receiving layout with the proper equipment conveniently located is essential for the receipt of meat supplies.

(1) Personnel. Adequate personnel must be available on delivery dates to receive meat supplies. Factors such as employee leave, special holidays, feature items, and processing time required must be considered in determining the type and number of personnel required to handle the incoming meat supplies.

(2) Receiving facilities. A separate entrance to the bulk storage area is required for receiving meat supplies. The unloading dock at the meat receiving door should be level with the truck bed to aid in the safe handling of incoming meat items. Receiving rails, extending from the receiving door to the inside of the cooler, facilitate the handling of heavy carcasses, hindquarters, or forequarters. Army regulations require that all carcass meats be weighed at the time of receipt. A rail scale, attached to the rail

at the receiving door, allows the meat to be weighed as it is unloaded from the truck. As the meat items are weighed and tallied, they should be hung on the receiving rail by type; for example, all beef items should be hung together.

(3) Meat coolers. The meat coolers must be prepared in advance of delivery dates and should be cleaned and set in order as a part of the daily routine of the department. The meat on hand in the coolers should be arranged so that it will be accessible for use before the incoming shipment. Rough cuts, such as inside skirts, flanks, and kidneys, are usually cut from the hanging carcasses before they are moved into the cooler. The carcasses may then be moved into the cooler and broken down into main sections (hindquarter, forequarter, etc.) or into primal cuts (rounds, ribs, loins, etc.). Power equipment may be used to break down the carcasses outside of the cooler. Cress tree type meat hanging hooks (a vertical hanging metal bar with 8 or 10 meat hooks) suspended from overhead rails are used to hang the primal cuts in the cooler. If the meat cooler is large enough, the primal cuts may be converted into retail cuts within the cooler to avoid excess variation of temperature during processing. Items such as luncheon meats and smoked meats arrive prepackaged and ready for sale. However, a separate cooler is required for smoked meats because the humidity requirement is different than for other meats. Smoked meats require low humidity because they are dry-cured, and additional moisture increases bacteria count and adds to the possibility of deterioration.

11. STORING MEAT SUPPLIES. Because meat deteriorates rapidly at normal room temperature, proper refrigeration of storage and display areas is essential to protect meat from deterioration and to insure the quality and freshness of meat sold in the meat market. All refrigerated equipment and refrigerated areas should be equipped with mercury, column-type thermometers to provide a ready means of checking for proper temperatures. The meat market manager should check the operating temperatures of equipment and refrigerated areas at least three times daily: at the beginning of the day, middle of the day, and at the end of the day.

a. Meat chill storage space. Refrigerated rooms or coolers should be maintained at a temperature of 32° to 35° F. and should be arranged so that each type of meat (beef, pork, lamb, poultry, etc.) is allotted a designated space. To insure proper rotation of stock and to avoid confusion in locating specific items, each type of meat

should be kept in its allotted space with the latest items received placed at the rear. Older items should be placed near the front door of the cooler so that they may be used first. Meat items should never be stored on drip pans, baffles, or cooling units because it restricts air circulation and causes the formation of ice. Because of its high moisture content, poultry should be kept apart and stored separately from other meats. Carcass meats which are to be held longer than 72 hours should be unwrapped at the time of receipt and hung on meat hooks positioned so as to receive complete air circulation and full refrigeration.

b. Freezer space. Freezer storage space should be maintained at a temperature of 0° F. or lower. All frozen meats should be held at a temperature not higher than 0° F., and boxes should be stacked on pallets for complete circulation of air. The storage life of frozen meats held at 0° F. is approximately 12 months. When meats are held at temperatures above 0° F., the storage life is shortened, and meats should be held for minimum periods.

c. Meat processing rooms. Temperatures in the meat processing rooms should be kept at 50° to 55° F. Meat items should be held in the processing rooms the minimum time required to process and package the cuts for resale. Processed cuts should be moved to the display cases as quickly as possible or returned to the coolers for storage.

d. Meat display cases. The temperature in self-service type display cases should be maintained at 32° to 35° F., and display case storage compartments should be kept below 29° F. Meat items should not be stacked in the display cases above the level recommended by the manufacturer of the equipment.

12. CUTTING AND TRIMMING MEATS. Meat cutting is one of the final steps in the manufacturing-type operations of the meat market. However, it is one of the most important steps. It is here that the success or failure of the entire meat market operation is determined. Because of the high dollar value of the meat items handled, mistakes in cutting can be extremely costly in terms of the value of the cuts the item will yield. Meat items handled in the commissary store meat market may be received as carcass meats or wholesale cuts ready for final processing. Meat items are processed into cuts to conform to the demands of local trade customs and customer preference. A meat cut may be known by one name in a certain part of the country while the same cut

is known by an entirely different name in another locality. Large families require large cuts of meat (steaks and roasts) and packages that contain more than two or three chops. Therefore, variation in sizes and quantities of meat cuts produced is essential for customer service and satisfaction. Meat cuts should be made with clean, even strokes, using properly sharpened tools so that no jagged edges or misshapen cuts are produced. Inedible portions should be removed and excess fat trimmed to provide attractive and appetizing cuts.

13. SANITATION AND SAFETY. Meat is a highly perishable commodity that becomes increasingly susceptible to bacteria as it is processed from carcass state to finished product. The sharp tools used in cutting meat and power-operated machines used in processing meat are all potential sources of serious accidents. Therefore, a well-planned and continuously enforced sanitation and safety program is vital to efficient operations in a commissary store meat market.

a. Sanitation. Basic sanitary regulations established by the Army Medical Service, are outlined in AR 40-5. All personnel who have supervisory authority over the commissary store meat market--the commissary officer, the store manager, the meat market manager--are responsible for enforcing these regulations. The commissary officer inspects the meat market daily to insure that all equipment is properly cleaned and maintained. An ample supply of hot water (180° F. or higher) and a suitable detergent must be available in the meat market during hours of operation for cleaning all meat market areas, equipment, and handtools. The following rules apply to meat market sanitation:

(1) Edible products. Meat, meat products, poultry, and waterfoods must not be allowed to remain out of refrigeration any longer than is absolutely necessary. Edible products must be handled in clean containers used only for that purpose. These meat trays and platters, and other surfaces that come into direct contact with meat must be sanitized daily. They must be washed with hot water and detergent, prerinsed in clear hot water, and given a final rinse in 180° F. water for at least 30 seconds.

(2) Inedible products. The handling of meat scraps, bones, blood, offal, and other items to be discarded must be rigidly controlled. Adequate containers must be available to hold these byproducts, and they must be kept under refrigeration until they can be removed from the meat market. Arrangements should be made with the property disposal officer to have byproducts removed frequently enough so that they do not spoil or contaminate edible meats. Daily removal service should be provided if volume justifies it.

(3) Refrigerated rooms, refrigerators, and display cases. Refrigerated rooms and refrigerators must be emptied and washed at least bimonthly, and more often if required. Walls, floors, ceilings, dunnage, and shelving in these rooms or refrigerators must be kept clean and free of objectionable odors. If sawdust is used under the hanging meats, it should be swept away and fresh sawdust scattered when the inventory is low, just prior to a delivery. Meat display cases must be cleaned daily by washing with a clean cloth dipped in warm water and then wrung out. Display cases should also be checked several times during the workday and washed off inside and out as necessary. The mirrors or glasses should be cleaned as often as necessary to keep them free of handprints, smudges, blood, grease, and so on. Once a week, the cases must be emptied and thoroughly washed with hot soapy water, rinsed with hot water, and dried.

(4) Meat processing rooms. The floors, walls, and ceilings of meat processing rooms must be kept clean and free of mold at all times. Lighting must be adequate for safe operations and thorough cleaning. Processing rooms must be kept free of objectionable odors.

(a) Use of sawdust. Offensive odors develop in meat processing rooms if meat juices, scraps, or pieces of fat get onto rough floors or into floor seams or cracks. Therefore, reasonable use of sawdust is permitted. However, sawdust must be used properly and not as a substitute for cleanliness. Floors must be swept twice daily, at noon and at the end of the day. Sawdust and any scraps of meat or fat that stick to the floor should be removed. The floor should be spread lightly with clean sawdust before operations are resumed. Twice a week, at the end of the day's operations, the floors should be swept clean and then mopped with a minimum amount of hot water containing detergent and chlorine disinfectant. After the floor is dry, fresh sawdust should be spread lightly in the meat cutting areas.

(b) Cleaning. Walls adjacent to equipment should be cleaned daily as required. Walls, ceilings, lighting and other fixtures should be scrubbed down at least once every two months, or more often if necessary, with a solution of hot water, nonsudsing detergent, and chlorine disinfectant.

(5) Power-operated equipment. Electrically operated meat market equipment (such as power saws, meat slicers, and meat grinders) must be kept clean and in good operating condition. The commissary officer, in his daily inspection, insures that this sanitary requirement is being met. Parts of the power-operated equipment that come into contact with meat must be sanitized daily ((1) above).

(6) Other tools and equipment. Other tools and equipment (such as food preparation tables, handtools, and scales) should be cleaned and sanitized daily or more often when required.

(7) Personal cleanliness. Before the store opens for business each day, the commissary officer or his authorized representative inspects all meat market personnel. He particularly examines hands, fingernails, and clothing for cleanliness. Any person who shows signs of a cold, skin disease, infected cuts, boils, or any other illness should not be allowed to remain on duty.. Meat market personnel must wear clean outer clothing (T-shirts and undershirts are not considered proper outer clothing). Personnel must have properly trimmed or netted hair, and all male personnel must shave daily. Fingernails must be clean and short. Hand-washing facilities equipped with hot water, soap, and single-service towels must be available in meat processing rooms and all meat market personnel must keep their hands clean at all times. Personnel must wash their hands thoroughly after using the restroom.

b. Safety precautions. The commissary officer, store manager, and meat market manager must insure that the meat market is well lighted at all times to facilitate operations and minimize occupational hazards. The meat market manager must see that all safety precautions are enforced and that safe operational practices become habitual with his operating personnel. Safety precautions for operating personnel are as follows:

(1) Basic precautions. The following basic safety precautions should be observed during meat market operations:

(a) Always give full attention to the work and use caution and good judgment.

(b) Get bone scratches and knife cuts treated immediately.

(c) Report refrigerant leaks immediately.

(d) Do not reach into soapy water for a knife or any other sharp tool.

(e) Do not allow work space to become crowded or cluttered.

(f) Keep cutting tools sharp.

(g) Keep the floor clean and free of fat or meat trimmings that can cause slips or falls.

(2) Use of handtools. The following safety precautions should be observed when using hand meat-cutting tools:

(a) Keep knife handle free of grease.

(b) Hold knife firmly.

(c) Never grab for a falling knife. Step back, let it fall, and then pick it up.

(d) Never lay a piece of meat over a knife.

(e) Do not carry a knife when both hands are needed to carry meat or heavy packages.

(f) Put knives in a rack or knife pouch when they are not being used.

(g) Do not cut toward yourself.

(h) Use a meat boning hook when boning meat.

(i) Wear a metal mesh safety glove, boning cuff, and apron when cutting meat. Wear a waterproof rubber or plastic apron when handling frozen tempered meats. Do not wear a metal mesh safety glove when operating a powersaw.

(j) Use handtools (such as knives, steels, and saws) only for the purposes for which these tools were intended.

(k) Remove meat hanging hooks from storage rooms and break areas when the hooks are not being used.

(l) When steeling a knife, keep thumb on top of the steel's handle and behind the guard.

(3) Use of power-operated equipment. The following safety precautions should be observed when using power-operated equipment:

(a) Keep hands at a safe distance from the powersaw blade and use the guides and guards provided. Do not talk while operating a powersaw.

(b) Adjust the meat slicing machine for thickness of cut before turning the machine on. Never talk while operating such a machine.

(c) Do not use a meat grinder unless the safety guard is in place. Feed meat into the grinder with a wooden or aluminum stomper, never by hand.

(d) Never remove anything from the grinder hopper while the machine is operating.

(e) Remove the power cord from the outlet before cleaning a power-operated machine. If the plug is permanently connected to wall wiring, disengage the power switch before cleaning the machine.

(f) Use all safety devices provided with the machine being operated.

(g) Power-operated machines should be operated and cleaned by experienced meatcutters or under close supervision of an experienced meatcutter.

(4) Use of the overhead rail. When using the overhead rail, remove the meathook from the rail as soon as the meat is taken off the hook. Be sure the rail switch is closed so that meat cannot fall from the rail.

(5) Lifting precautions. The following precautions should be observed when lifting heavy objects in the meat market:

(a) Get a good handhold.

(b) Get a firm footing and position the body so that a straight lift can be made.

(c) Never lift while in an awkward position. Lift with a smooth even motion.

(d) When lifting from the floor, keep arms and back as straight as possible, bend knees, and then lift with leg muscles.

(e) When lifting from a bench or table, move the object close to the body to avoid an unbalanced position. Keep back as nearly vertical as possible and lift with the leg muscles.

(6) Fire prevention. The following fire prevention rules should always be observed during meat market operations:

(a) Smoking. Smoking should never be permitted where meat is handled. Smoldering cigarettes are hazardous around sawdust.

(b) Good housekeeping. Practicing good housekeeping is one of the best ways of preventing fires. Tools and utensils should be kept in place. Electrical wiring should be checked frequently and kept clean, dry, and grease-free. Aisles should be kept clear. Open aisles are essential to safe evacuation if a fire should start.

SECTION III

POPULAR CUTS OF FRESH MEAT

14. CARCASS BEEF. Carcass beef may be quartered by the packer or wholesaler for convenience in handling, or it may be quartered by meat market personnel after it is received. The primal and retail cuts of carcass beef are as follows:

a. Beef hindquarter. The following primal and retail cuts of beef (fig. 6) are produced from the hindquarter:

(1) Flank. The flank is removed from the hindquarter following the natural contour of the round to a point 3 inches from the eye of the loin end. The retail cuts of beef produced from the flank are flank steak, stew beef, and ground beef.

(2) Sirloin tip. The sirloin tip may be processed as roasts or steaks. The kneecap end and stringy meat are used for stew or grinding. The retail cuts of beef from the sirloin tip are boneless roasts and sirloin tip steaks.

(3) Loin. The surface fat of the loin is trimmed to one-half inch thickness and the excess tail removed leaving no more than 3 inches on the short loin. Trimmings are used for ground beef. The retail cuts of beef from the loin are sirloin steaks, porterhouse steaks, T-bone steaks, and club steaks.

(4) Rump. The rump is boned and rolled. All fat and gristle are removed from inside, and the outside is trimmed of excess fat. The rump is sold as boneless roast.

(5) Round. The round is processed into steaks. Excess fat and gland are removed, and steaks are properly trimmed to offer extra value. The steaks produced from the round are round steaks and swiss steaks.

(6) Heel of round. The heel of round is processed for stew or ground beef. The fibrous core and outer skin are removed before grinding.

(7) Shank. The shank is boned and leaned cut for stew and ground beef.

1. Hind shank meat, bone-in
2. Soupbones
3. Kidney
4. Flank steak
5. Bottom (outside) round steak, eye removed
6. Eye of round steak
7. Sirloin tip (knuckle) steak, covering on
8. Sirloin tip (knuckle) steak, covering off
9. Full round steak
10. Top (inside) round steak
11. Bottom (outside) round steak, eye of round included
12. Sirloin steak
13. Club steak
14. T-bone steak
15. Porterhouse steak
16. Sirloin tip, covering on
17. Top (inside) round
18. Eye of round
19. Sirloin tip, covering removed
20. Rump roast, boneless
21. Bottom (outside) round, eye still attached
22. Heel of round

Figure 6. Primal and retail cuts of beef processed from the hindquarter.

b. Beef forequarter. The primal and retail cuts of beef produced from the forequarter (fig. 7) are as follows:

(1) Plate beef. The plate (navel) can be sold as regular soup meat or it may be cut for short ribs, soup meat, or ground beef.

(2) Rib. The first four ribs from the small end are used for steaks or roasts. The remaining two are used for roasts only. The retail cuts produced from the rib are rib steak, rib-eye steak, delmonico steak, and rib roast.

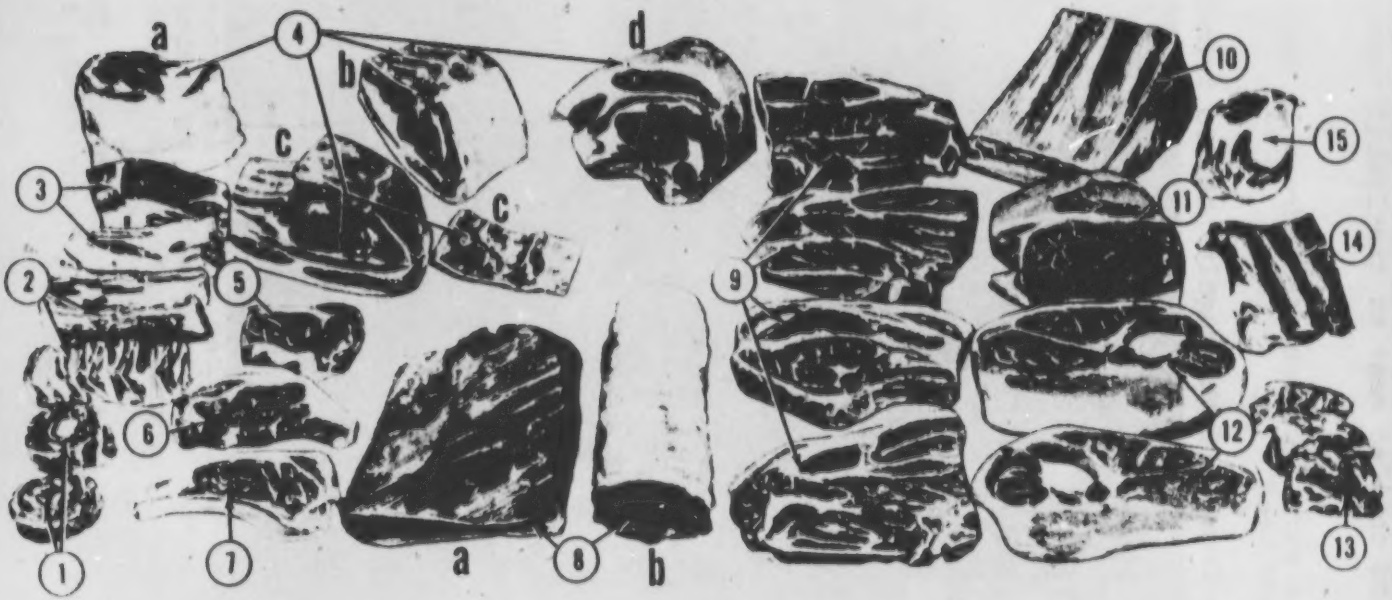
(3) Brisket. The brisket is trimmed of excess fat and used for rolled roast or beef stew. Brisket beef may be sold as rolled roast, stew beef, or ground beef.

(4) Chuck. Several types of pot roasts are produced from the chuck. The cuts are trimmed of excess bone and fat and merchandised as blade bone pot roast, arm roast (round bone), boneless pot roast, or chuck steaks.

(5) Neck. The neck is boned out for stew or ground beef, and the bones may be sold as soupbone.

(6) Shank. The shank is sold as soup meat with bone and as stew beef or ground beef. The soft meat on the front of the shank with the skin removed may be used for stew beef, and the center portion of the shank is cut and sold as soupbone.

c. Ground beef production. Compression applied in the grinding of meat generates heat. For this reason, the grinder head and all its parts should be thoroughly chilled before use. Heat causes meat to lose color and moisture, which results in an unappetizing appearance and a dry end product. The first grinding should be through a 1/2-inch plate and the second grinding through a 1/8-inch plate. As the meat is ground, the lean meat should be thoroughly mixed with the fat for uniform color. After the first grinding, the rough ground beef should be thoroughly chilled in the meat cooler at 32° to 35° F. For quality ground meats, the principle "the cooler the better" should be applied. This principle, when applied to meats used in ground beef products and equipment used in their preparation, yields a better appearing and more appetizing finished product. Procedures which should be followed in producing good ground beef are as follows:



1. Skirt (filet of skirt) steak
2. Short ribs, cut short and long
3. Short plate, flat covering removed
4. Rib Roasts
   a. Rolled rib roast, boneless
   b. Standing rib roast with covering tied, replacing featherbones
   c. Standing rib, featherbones removed
   d. Standing rib with featherbones still intact
5. Rib eye steak
6. Rib steak, boneless
7. Rib steak, bone-in
8. Boneless brisket
   a. Flat
   b. Rolled and tied
9. Chuck roasts
10. Block (English, Boston)
11. Shoulder, boneless
12. Arm roasts
13. Neck bones
14. Rib bones with finger meat
15. Soupbone

Figure 7. Primal and retail cuts of beef processed from the forequarter.

(1) Grind chilled meat at the lowest temperature possible.

(2) Make sure equipment is thoroughly chilled before processing ground beef.

(3) Use fresh and thoroughly chilled trimmings.

(4) Grind beef twice and chill completely before second grinding.

(5) Thoroughly blend fat with lean.

d. Boneless beef. Occasionally, carcass beef may be boned and processed into boneless cuts (fig. 8). When meat is boned, there is a certain amount of shrinkage in the weight of the cuts produced. Allowance for this shrinkage must be made when the cuts are priced. To a great extent, the skillful and careful work of the meatcutter is the deciding factor in the amount of shrinkage incurred in boning meats. Meat yield varies from carcass to carcass, but it is generally accepted that there is a 25 percent shrinkage in weight when meat is boned out. The safest way to determine cost for boneless cuts is to weigh the meat with bone in and establish the cost. Then after the meat is boned, the boneless meat should be weighed and the weight should be divided into the cost established with bone in. The result will be the cost per pound for the boneless meat. A rule of thumb that can be used in establishing the cost per pound of boneless meat is to take one-third of the original cost of the meat and add this amount to the original cost. This will give the cost per pound for the boneless meat.

15. PREPROCESSED BEEF. There are two types of preprocessed beef authorized for use in the meat market: market ready beef and six-way frozen boneless beef.

a. Market ready beef. Market ready beef is processed into primal or subprimal cuts by the packer. The cuts are trimmed and vacuum packaged in tight-fitting plastic bags to protect the quality and flavor of the meat. Market ready beef is shipped in easy-to-handle fiber cartons, and processing required by meat market personnel is held to a minimum. The commissary officer must determine if the use of market ready beef will benefit his patrons without losing the principal advantage the commissary offers--low prices. The effect on prices must be determined locally, considering such

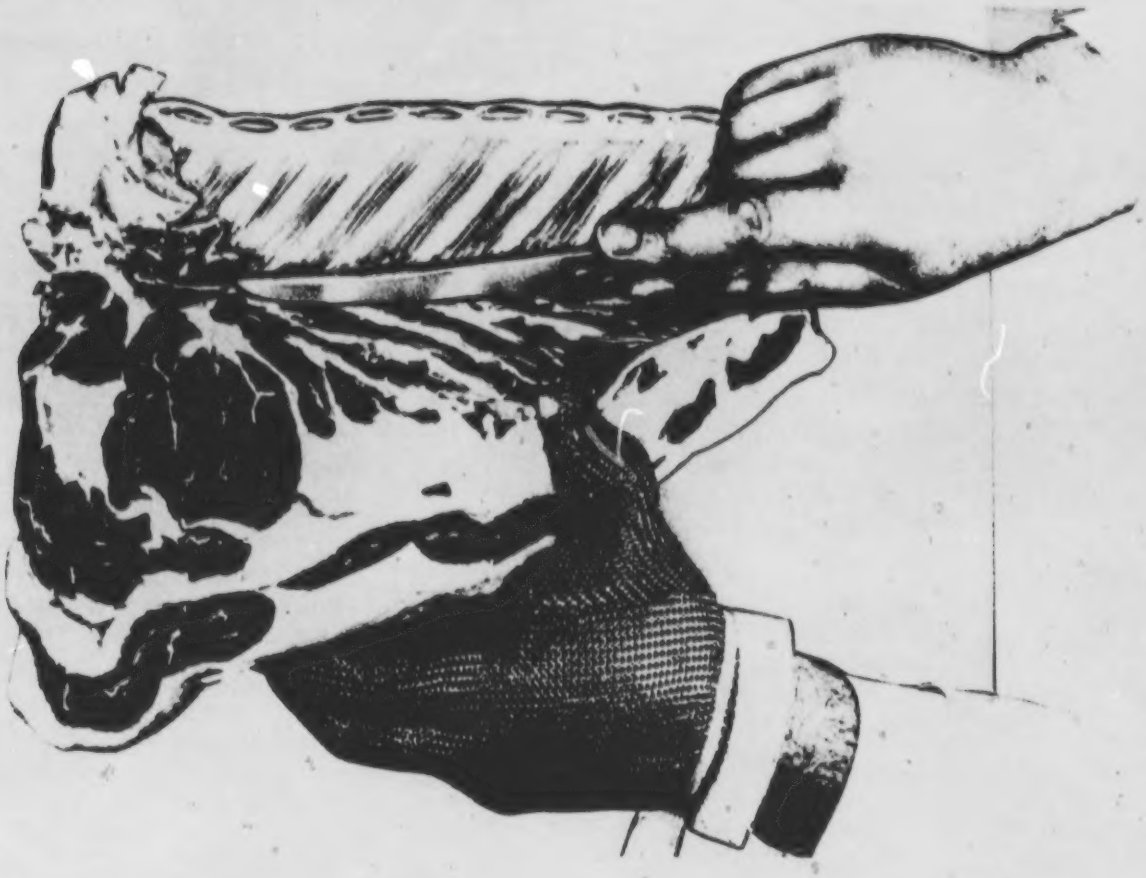


Figure 8. Processing boneless cuts of beef.

factors as yield, storage life, handling characteristics, and patron acceptability. The primal cuts included in market ready beef (fig. 9) are as follows:

(1) Blade chuck. The blade chuck is one-half of the five-rib, square-cut chuck. It is trimmed completely free of blood clots, glands, and inside surface fat. The exterior fat is trimmed to within one-half inch.

(2) Armbone chuck. This is the portion of the square-cut chuck remaining after removal of the blade chuck. The knuckle end of the armbone remains in this cut. Exterior fat is trimmed to within one-half inch.

(3) Full loin. The full loin is cut retail style, by separating the loin from the round at the third sacral vertebra from the "V" in the backbone. This gives the correct loin angle for retail cutting of bone-in sirloin steaks. All fat is trimmed to within one-half inch.

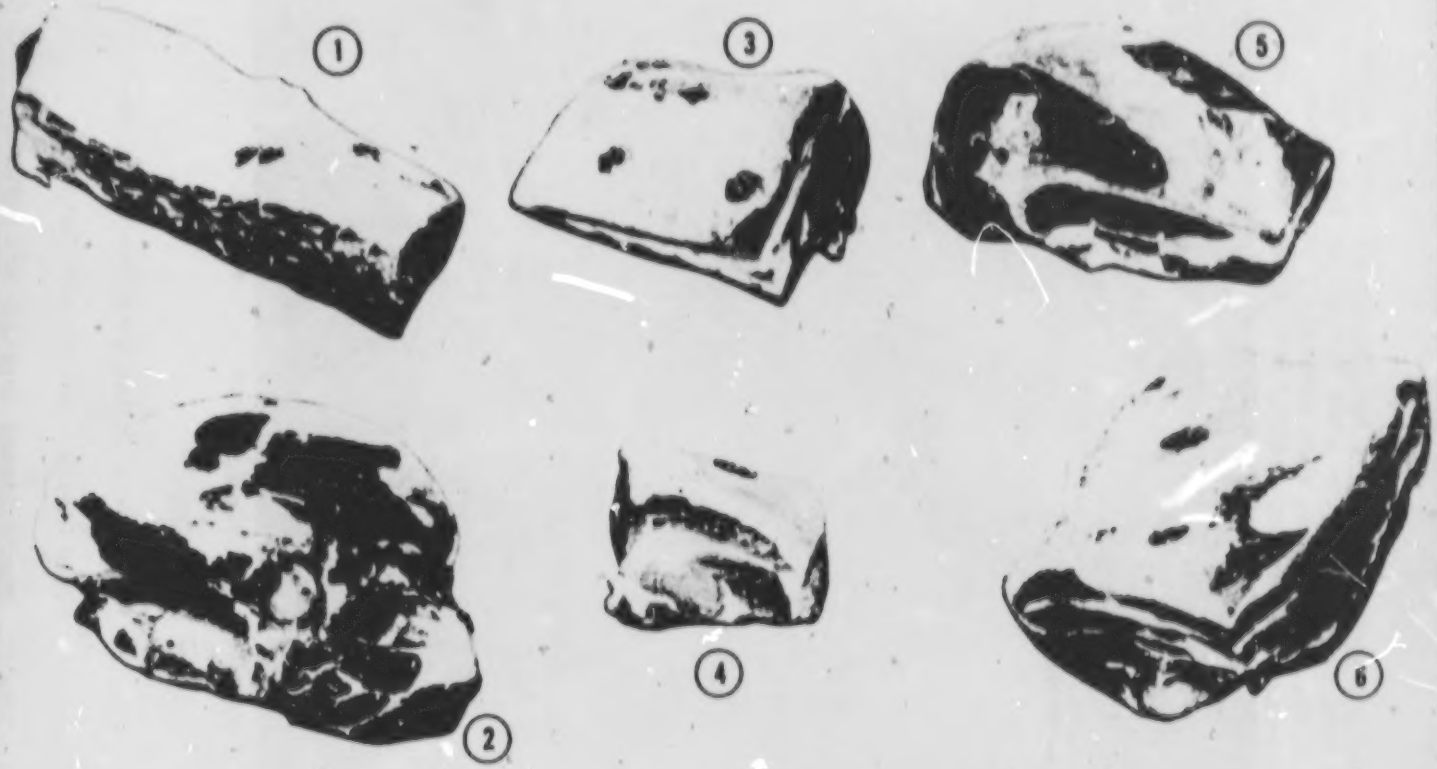
(a) Short loin. The short loin is removed from the full loin with the hipbone remaining in the loin end. The flank is cut to 8 inches, and the tenderloin fat is trimmed to within one-half inch. Exterior fat is also trimmed to one-half inch.

(b) Loin end. The loin end is that portion of the full loin remaining after the short loin is removed. All cavity fat is removed, and exterior fat is trimmed to within one-half inch.

(4) Rib. The standard seven-rib is made by removing the chine bones and short ribs. The short ribs are cut 3 inches from the eye muscle on the loin end and 4 inches from the eye muscle on the chuck end. All exterior fat is trimmed to one-half inch.

(5) Round. The aitch bone, sacral vertebrae, and tail joints are removed from the round; and the hind shank is removed at the stifle joint. The femur bone remains intact, and all exterior fat is trimmed to within one-half inch.

(6) Sirloin tip. This is a full retail-type sirloin tip. The kneecap knuckle is removed, and all exterior fat is trimmed to within one-half inch.



1. Loin
2. Round
3. Rib
4. Sirloin tip (knuckle)
5. Armbone chuck (shoulder)
6. Blade chuck

Figure 9. Primal cuts of market ready beef.

b. Frozen boneless beef roasts and steaks. Frozen boneless beef is a specification item procured by the Armed Forces for issue, and it is available for use in the meat market, when necessary, to supplement carcass beef cuts or when carcass beef is not readily available. Carcass beef is boned and processed by the packer into six types of boneless retail cuts. The boneless beef is packaged in boxes and quick frozen in a wind tunnel or sharp freezer with forced air circulation. Frozen meat should be stored at a temperature of 0°F, or below. Boxes should be stored on pallets to allow complete circulation of air. The freezer temperature may fluctuate for short periods when personnel enter the freezer to restock or withdraw. However, the temperature should never be allowed to exceed 6°F. The storage life for frozen meats at a temperature of 0°F, is approximately 12 months. At temperatures above 0°F, the expected good quality storage life is short, and meats should be held for minimum periods. All frozen meats should be thawed under refrigeration and should be processed and merchandised as soon after thawing as possible. The types and styles included in frozen boneless beef roasts and steaks are as follows:

(1) Type I, Oven Roasts

Style 1. Knuckle

Style 2. Inside Round

Style 3. Eye of Round

Style 4. Outside Round (Mechanically Tenderized.)

(2) Type II, Pot Roasts

Style 1. Chuck Roll (Blade End)

Style 2. Shoulder Clod

Style 3. Chuck Roll (Neck End.)

(3) Type III, Grill Steaks (regular and formed)

Style 1. Rib Eye

Style 2. Top Sirloin Butt

Style 3. Loin Strip

(4) Type IV, Tenderloin Steaks (regular and formed)

(5) Type V, Swiss Steaks (regular and formed)

(6) Type VI, Minute Steaks (regular and formed)

FIGURE 10. DELETED.

c. Other types of frozen beef. In addition to the above, there are two other types of beef available under separate specifications.

(1) Diced meat (MIL-B-46398)

(2) Ground meat (MIL-B-003854(GL)

16. CARCASS VEAL. Carcass veal may be received as a whole side of veal and processed by meat market personnel, or it may be procured in wholesale cuts to meet specific patron demands. The primal and retail cuts processed from carcass veal (fig. 11) are as follows:

a. Neck. The neck is boned out for ground veal and chop suey meat.

b. Shoulder. The shoulder is processed into blade-bone steaks and round-bound steaks (cutlets).

c. Brisket. The brisket may be sold as pocket veal roast or processed as stew meat, chop suey meat, or ground veal.

d. Rib. The rib of veal is processed and sold as rib chops.

e. Breast. Retail cuts from the breast are

(1) pocket veal roasts.

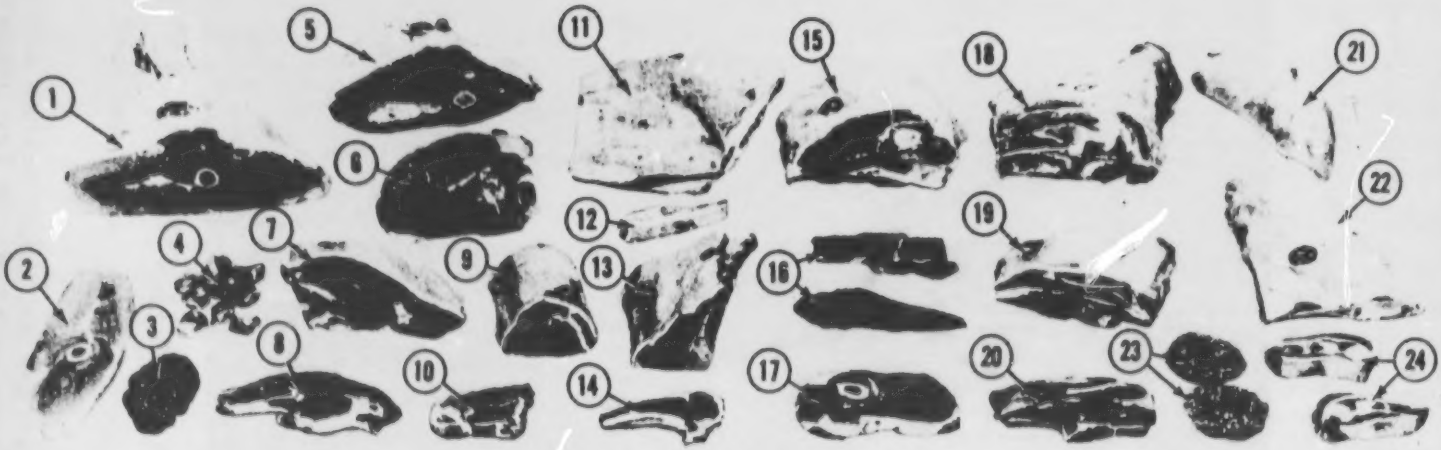
(2) riblets.

(3) stew meat.

(4) braising veal.

(5) ground veal.

f. Loin. The loin is processed as loin chops.



1. Leg of veal
2. Veal cutlets (round steak)
3. Veal kidney
4. Stew, boneless
5. Leg roast, semiboneless
6. Rump roast
7. Sirloin roast
8. Sirloin chop
9. Loin of veal
10. Loin chop
11. Breast (navel) for stuffing
12. Breast (navel) for stew
13. Rib of veal
14. Rib chop
15. Armbone roast
16. Veal cubed steak
17. Armbone chop
18. Blade and neck portion of shoulder
19. Blade roast
20. Blade chop
21. Shank, whole
22. Breast (brisket) for stuffing
23. Veal patties
24. Breast (brisket) for stew

Figure 11. Primal and retail cuts processed from carcass veal.

g. Flank. The flank is used for ground veal.

h. Sirloin. The sirloin may be sold as roast or processed as veal steaks.

i. Rump. The rump is boned and rolled for roast.

j. Leg. The leg of veal is processed as roast and steaks.

k. Shank. The fore and hind shanks are boned and processed as stew meat, chop suey meat, and ground veal.

17. CARCASS LAMB. Carcass lamb may be received whole for processing by meat market personnel or as wholesale cuts ready for final processing. The primal and retail cuts of carcass lamb (fig. 12) are as follows:

a. Neck. The neck is boned and processed for stew meat and lamb patties.

b. Shoulder. The shoulder is processed as lamb steaks.

c. Brisket. The brisket is used for stew meat and lamb patties.

d. Rib. The rib of lamb is processed as lamb chops.

e. Breast. The retail cuts from the breast of lamb are

(1) pocket lamb roast.

(2) riblets.

(3) stew meat.

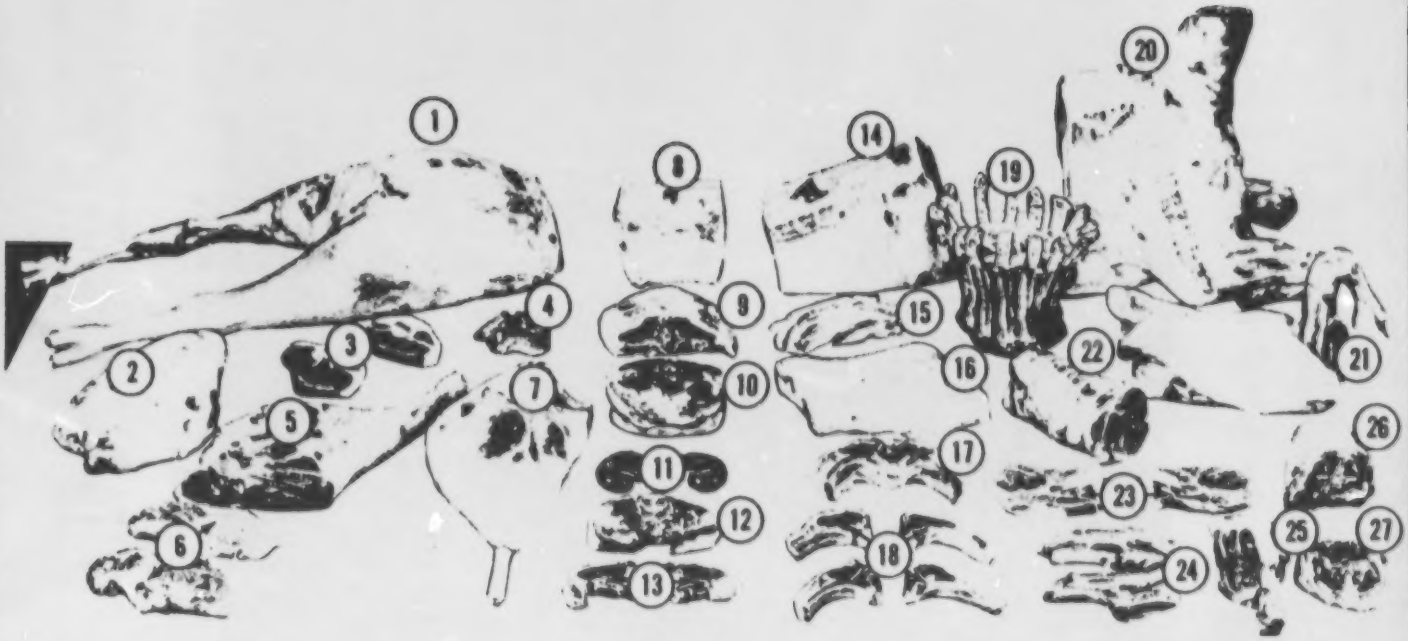
(4) lamb patties.

f. Loin. The loin is processed as lamb chops.

g. Flank. The flank is ground for lamb patties.

h. Leg. The leg of lamb is trimmed and processed as roast.

i. Shank. The fore and hind shanks are boned and processed as stew meat, lamb patties, or for braising.



1. Saddle (two legs joined together)
2. American leg
3. Leg chops
4. Boneless shank meat
5. Leg with sirloin chops removed
6. Sirloin chops
7. French leg
8. Loin, untrimmed
9. Loin, trimmed
10. Double kidney loin chop
11. Kidneys
12. Double loin chop
13. Loin chop
14. Rib (rack)
15. Riblets
16. Breast
17. Double rib chops
18. Rib chops
19. Crown roast
20. Triangle
21. Mock Duck
22. Boneless shoulder roast
23. Armbone chops
24. Blade chops
25. Foreshank
26. Neck
27. Neck slice

Figure 12. Primal and retail cuts processed from carcass lamb.

18. POPULAR CUTS OF PORK. Pork is usually received as wholesale cuts such as loins, shoulders, and hams (fig. 13). The retail cuts of pork processed for sale in the commissary store meat market are as follows:

a. Pork loin. The retail cuts of pork processed from the loin are as follows:

(1) Rib roast. The rib roast includes the first seven ribs from the rib end of the loin.

(2) Loin roast. The loin roast is cut 9 inches from the loin end.

(3) Pork chops. Pork chops may be cut from any portion of the loin. They should be properly trimmed and merchandised as center or end cut chops.

(4) Loin end. The loin end is boned and used for chop suey meat, meat loaf, or pork sausage.

(5) Rib end. The rib end may be merchandised in several ways as follows:

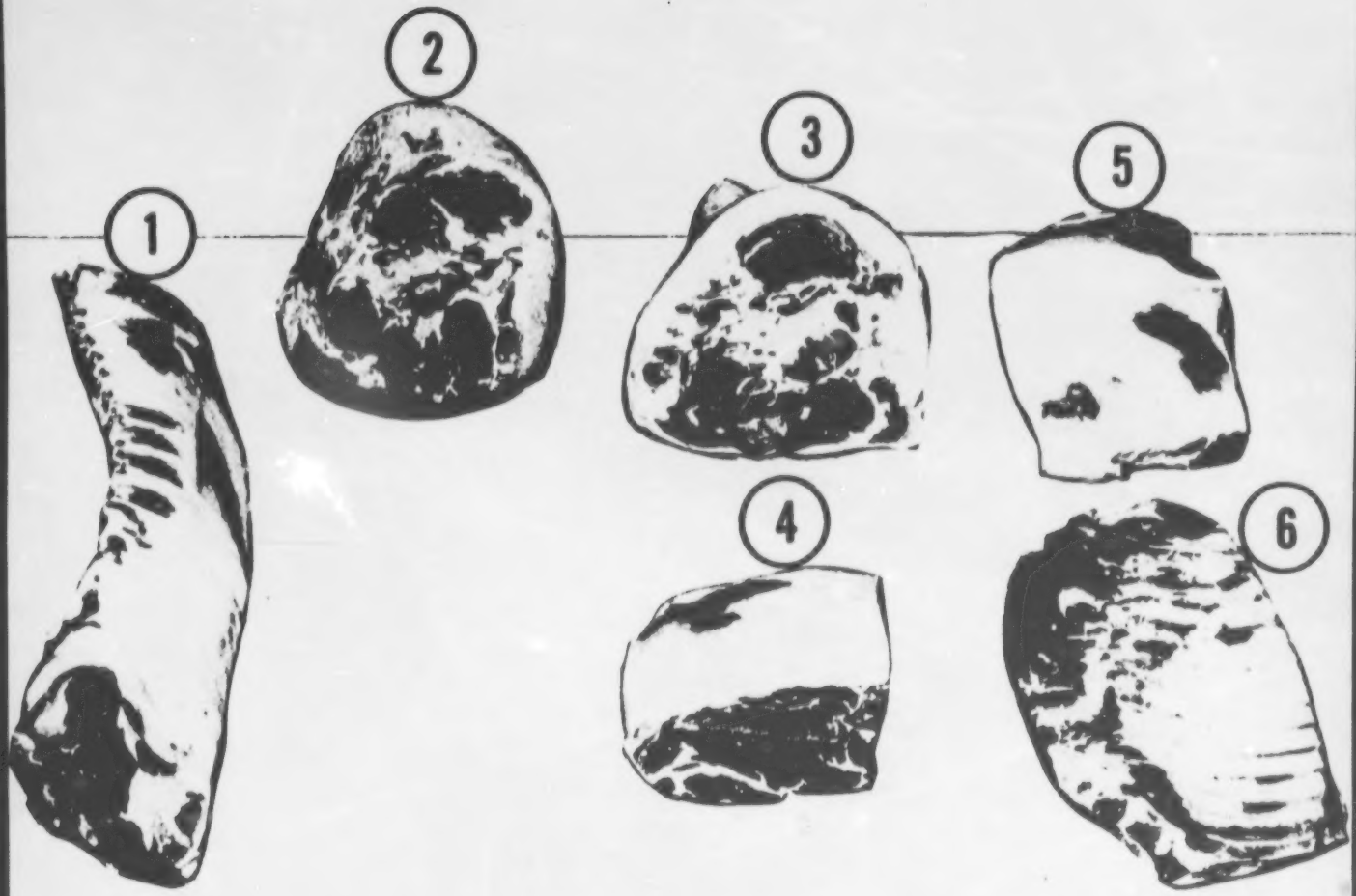
(a) Boneless roast. The blade and upper layer of fat is removed from two rib ends. Rib bones are removed by scalping, and the two boneless pieces are tied back to back for roast. Rib bones are sold as backbones or spareribs.

(b) Country back ribs. With the blade bone removed, the rib end is cut diagonally and sold as country back or country style ribs.

b. Pork shoulders. Pork shoulders may be sold whole, or they may be processed to sell butt and picnic portions separately. The shank and knuckle may be boned out for chop suey meat or sold for boiling.

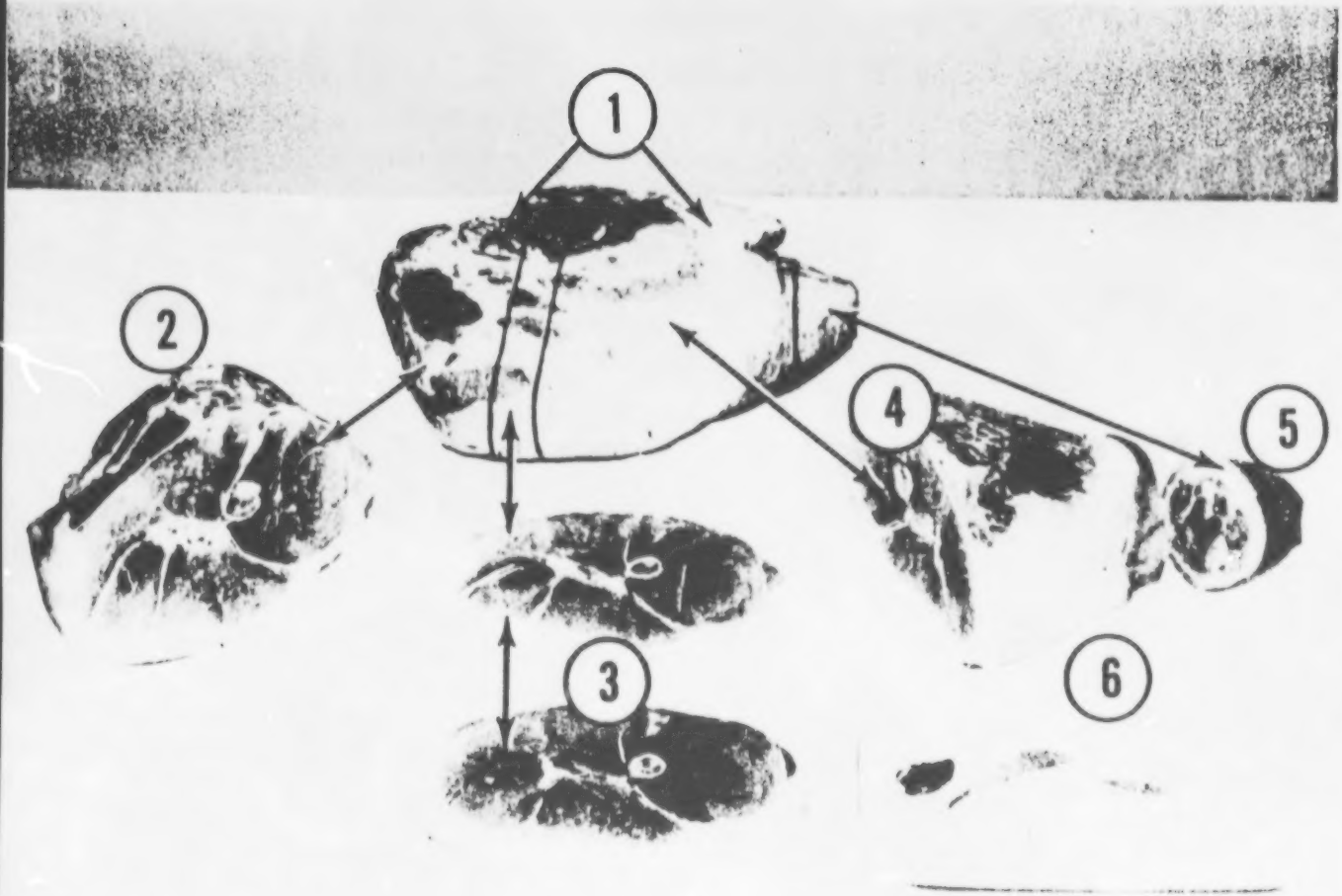
c. Hams. Hams weighing under 12 pounds should be sold as whole or half hams without removing any center slices. Center slices may be cut from larger hams and sold separately. The shank and butt portions may be sold whole or processed into breakfast slices (fig. 14).

19. POULTRY. Poultry is one of the most popular meat items in the country today among all classes of people. Because of the variety of ways in which it can be prepared and



1. Pork loin
2. Smoked ham
3. Fresh ham
4. Boston butt
5. Fresh shoulder
6. Spareribs

Figure 13. Wholesale cuts of pork.



1. Whole smoked ham
2. Butt end
3. Center slices
4. Shank end
5. Hock
6. Excess fat

Figure 14. Retail cuts of smoked hams.

its year around availability, poultry continues to grow in public favor. To the consumer, poultry generally means chickens. However, broadly speaking, poultry includes all domestic birds that are used for food, such as turkeys, ducks, geese, squab, guinea hens, cornish hens, and capons. Poultry offered for sale in the commissary store meat market must be in prime condition. To insure customer satisfaction, all poultry must be carefully dressed and processed and properly displayed.

a. Classes of poultry. The following classes of poultry are designated by the Poultry Division, USDA Marketing Service:

(1) Broilers. Broilers are immature chickens weighing from three-fourths pound to 2 pounds.

(2) Fryers. Fryers are young chickens weighing from 2 to 3 1/2 pounds.

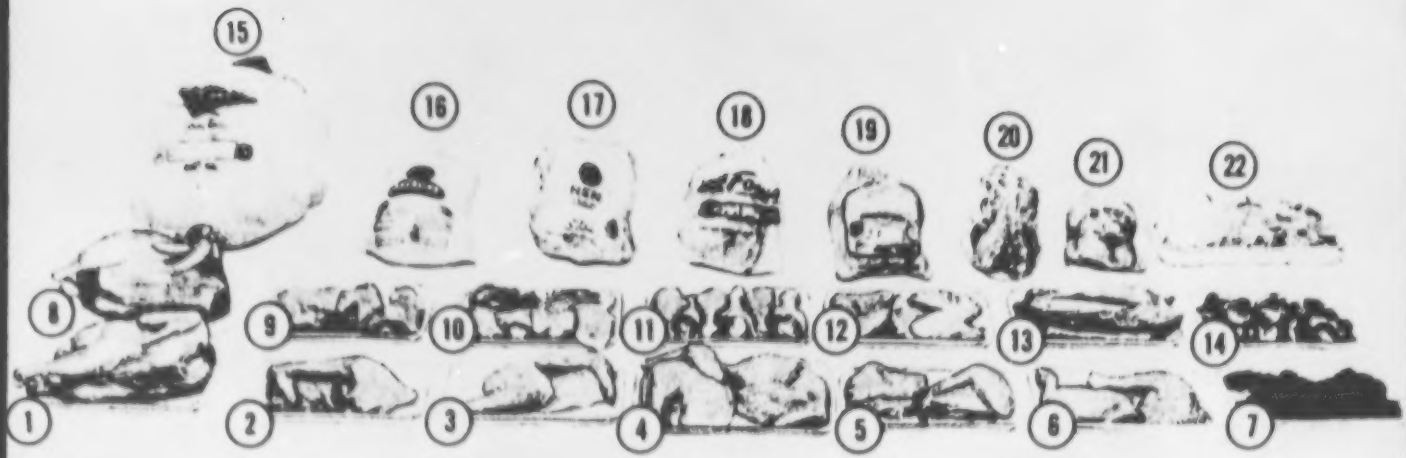
(3) Roasters. Roasters are chickens that weigh over 4 pounds.

(4) Fowl. Fowl are older chickens, usually over 1 year of age. They are considered to be less tender, and a moist method of cooking should be used in preparing them.

(5) Ducks. Ducks are classed as such without any further distinction, or they may be classed as young or old ducks.

(6) Turkeys. When different classes of turkeys are quoted, they are commonly designated as young hens and toms (up to 1 year in age) and old hens and toms (over 1 year in age). Young turkeys are highest in price, and old hens are higher than old toms.

b. Merchandising fryers. Fryers are usually cut up or disjointed for frying, or they may be cut into quarters (fig. 15). A few may be left whole and sold as small roasters. Because of the consumer demand for individual parts of fryers, many commissary meat markets display the different fryer parts separately in their poultry cases. Fryer parts can be procured from packing companies or processed from whole fryers in the meat market. The pricing of each fryer part should be based on demand. Fryer parts are usually priced in the following sequence:



1. Broiler
2. Breast and leg quarters merchandised together
3. Broiler, split and merchandised as one-half
4. Broiler, split and merchandised as both halves
5. Breast quarters
6. Leg quarters
7. Livers
8. Fryer
9. Breast
10. Thighs
11. Drumsticks
12. Wings
13. Back and necks
14. Gizzards and hearts
15. Turkey
16. Duck
17. Hen
18. Fowl
19. Roaster
20. Fryer in plastic bag
21. Cornish hen
22. Fryer cut-up

Figure 15. Merchandising fryers and other types of poultry.

(1) Breasts.

(2) Thighs.

(3) Drumsticks or legs.

(4) Wings.

(5) Necks and backs.

c. Merchandising other types of poultry. Turkeys, fowl, roasters, and all other poultry sold in the meat market are usually received frozen and prewrapped as shown in figure 15. Frozen poultry should be stored in a freezer until ready for display and sale. When these items are displayed, they should be taken directly from the freezer to the scales and weighed; then they should be priced and placed in an open display freezer to prevent thawing. The loss of price tags is prevented by securing a tag label to each item by a plastic or wire tie. At no time should poultry products be thawed and refrozen.

20. VARIETY MEATS. Variety meats are the edible parts of beef, veal, pork, and lamb that cannot be classified as regular cuts. They are also known as fancy meats and meat byproducts. Some of the well known variety meats are brains, sweetbreads, liver, kidneys, hearts, and tongues. Most variety meats are available fresh or frozen; in addition, brains and tongue are available canned or smoked. Variety meats are highly perishable and are usually procured frozen. They should be stored in a freezer at 0° F. until ready for display and sale. Proper identification, quality, and condition constitute the basic inspection factors for variety meats. Because of their high nutritional value, variety meats are usually in demand in the meat market. The methods of preparing variety meats are determined by their particular characteristics. They cannot be classified as those which may be cooked by the moist heat or dry heat methods, and some additional preparation is usually required before cooking.

a. Types of variety meats. The types of variety meats commonly found in the meat market are as follows:

(1) Brains and sweetbreads. Brains and sweetbreads are similar in tenderness and texture. They require the same preliminary preparation and are cooked and served in much the same manner.

(a) Brains. The brains of food animals are used for food and may be procured fresh, frozen, or canned. Beef and calf brains are usually clotted with blood caused by the method of slaughter. Badly bruised and clotted brains must be used as quickly as possible to avoid rapid deterioration. Because of the high moisture content, brains should be frozen solid if not used within a few days.

(b) Sweetbreads. Sweetbreads are the thymus glands of beef, calf, and lamb. As the beef animal matures, the thymus gland disappears; therefore, beef sweetbreads come from young beef not more than 1 year old. Sweetbreads may be prepared by frying, braising, or boiling.

(2) Liver. There are four classes of liver suitable for meat market procurement: class A, calf; class B, beef; class C, lamb; and class D, pork. Liver may be procured fresh chilled or frozen. Frozen liver should meet the same requirements as chilled liver and should be frozen solid when delivered, showing no evidence of refreezing or deterioration.

(a) Class A: calf liver. Chilled calf liver should be of good texture and good color, reasonably thick, short and plump. Dark-colored liver and that having a yellowish cast are not acceptable. Calf liver should not weigh more than 3 1/2 pounds. Veal liver is from young milk-fed calves and has a light chocolate color; calf liver is frequently from more mature calves or from those not fed on milk.

(b) Class B: beef liver. Chilled beef liver should be of good texture, good color (light chocolate brown), and good conformation (thick, short, and plump). Very dark or very light colored, thin livers should not be accepted. All livers should be thoroughly washed before being placed in the chillroom and should weigh not less than 8 pounds.

(c) Class C: lamb liver. Chilled lamb liver should meet all the requirements of calf liver except that it should be smaller and the color should always be dark mahogany. Lamb liver lacks the flavor characteristics of calf or good beef liver.

(d) Class D: pork liver. Chilled pork liver should meet all the requirements of good beef liver. All fat and sinew should be trimmed from pork liver.

(3) Hearts. Hearts procured for sale in commissary store meat markets are restricted to beef hearts. Either of two classes may be procured: class I, chilled; or class II, frozen. Beef hearts should be packed and delivered in cheesecloth wrappings, and they should be properly boxed in wax-paper-lined boxes.

(a) Class I: chilled. Chilled beef hearts should be thick and firm. They should be free of the fatty, gristly, top parts commonly known as the heart cap. All hearts should be thoroughly chilled before being packed for delivery.

(b) Class II: frozen. Frozen beef hearts should be of the same conformation and color as chilled beef hearts. They should be frozen solid when delivered, and they should show no evidence of refreezing or deterioration. Frozen beef hearts should not be accepted if they have been under refrigeration for more than 6 months.

(4) Kidneys. Kidneys from carcass meats processed in the commissary store meat market are processed and sold separately as a variety meat. When the fat is removed from kidneys, the cut should be made just deep enough to penetrate the fat so that it may be peeled off without damaging the kidney. Kidneys should be wiped clean and dry and may be sold whole or sliced.

(5) Tongues. The procurement of tongues for sale in the commissary store meat market is restricted to beef tongues. Two types of beef tongues are available: type I, fresh; and type II, cured and smoked. Fresh beef tongues may be either chilled or frozen. Two grades are suitable for use: grade A (Prime) and grade B (Good). Beef tongues should be short cut with all inedible parts and excess fat removed. They should be inspected for trimming, quality, and condition. Tongues should be packed either unwrapped in paper-lined commercial containers or separately wrapped in standard commercial containers.

(a) Type I: fresh. Grade A, fresh, chilled beef tongues should be short cut tongues of the highest quality. They should be plump, closely trimmed, and free of cuts, bruises, and imperfections. Grade A tongues should weigh not less than 3 1/4 pounds. Grade B, fresh, chilled beef tongues should be short cut tongues of good quality. They should be firm and reasonably free of

cuts. Grade B tongues should weigh not less than 3 pounds. Both grade A and grade B fresh frozen beef tongues should be of the same quality as prescribed for fresh chilled tongues, except they should be frozen solid and show no signs of deterioration.

(b) Type II: cured and smoked. Both grade A and grade B cured and smoked beef tongues should be of the same quality as fresh tongues. Cured and smoked tongues should be sweet-pickle-cured and smoked for not less than 12 hours at a smokehouse temperature of not less than 130° F.

b. Packaging and displaying variety meats. Because of their high nutritional value, variety meats are frequently in demand in the commissary store meat market. Variety meats lend a change to the menu and in many cases, economy to the budget of the homemaker. Variety meats have poor keeping qualities; therefore, caution should be used in the amounts displayed. A close check should be kept on variety meats in the display cases for freshness and eye appeal. Proper packaging and displaying of variety meats contributes to customer acceptance and to the overall success of meat market operations. Variety meats are packaged and sold as follows:

(1) Brains. Brains are very tender, soft in consistency, and delicate in flavor. They are generally packaged one set to a tray. Lamb brains may be packaged four sets to a tray.

(2) Sweetbreads. Excess blood should be removed from the membrane with a sharp knife. Sweetbreads should be packed and merchandised in a clean, covered container.

(3) Liver. Liver should be sliced in uniform size slices approximately one-half inch thick. It should be packaged and merchandised in a clean, covered container.

(4) Hearts. Hearts should be trimmed and all fat removed. Large hearts may be cut in half, and smaller hearts may be merchandised whole. Hearts should be clean and dry and packaged in a clean, covered container.

(5) Kidneys. Beef and veal kidneys may be merchandised whole or sliced in uniform slices about three-eights of an inch thick. Lamb kidneys may be left in the loin to be cut with the loin chops and merchandised as lamb kidney chops. When sold separately, lamb kidneys may be left

whole or butterflied to enhance their appearance. In most cases, eight to 10 lamb kidneys are packaged in a tray diagonally with the top side of the kidney up.

(6) Tongues. All blood spots should be removed from tongues with a clean damp towel. Any irregular pieces of meat and bone are trimmed from the base of the tongue, and the base is cut so that it is square and even. The tongues are flattened gently with a cleaver, folded end to end and tied, and packaged one to a tray.

APPENDIX

REFERENCES

AR 31-100	Commissaries Subsistence Supplies Authorized for Sale in Commissary Stores
AR 31-200	Army Commissary Operating Procedures
AR 40-5	Preventive Medicine
TM 10-417	Meat Market Operations, Commissary Stores
TM 10-418	Meat Processing Ration Issue

SLAB 387B Credit Hours: 3

LESSON EXERCISES

REQUIREMENT. Exercises 1 through 25 are multiple choice. Each exercise has only one single-best answer. Indicate your answer on the answer form.

1. The primary consideration in planning the location of the meat market should be the

   a. location of the storage and processing areas.

   b. type of service to be provided.

   c. store traffic patterns and customer convenience.

   d. amount of floor space allocated for the meat market.

2. Display equipment in the retail sales area should be arranged to

   a. insure proper rotation.

   b. encourage back and forth shopping.

   c. avoid or minimize backtracking.

   d. simplify merchandise selection and facilitate customer traffic.

3. The proper mix of meat items to be sold in the meat market varies according to

   a. the display method used.

   b. consumer preferences.

   c. display space available.

   d. the price of wholesale cuts.

4. Inspection standards for fresh meats sold in the meat market, including styles, classes, grades, and cutability standards, are established by the

   a. installation veterinarian.

   b. U.S. Department of Agriculture.

   c. Defense Personnel Support Center.

   d. U.S. Army Food Service Center.

5. Flecks of fat in lean meat are important in meat grading because they enhance juiciness. These flecks of fat are referred to as

   a. conformation.

   b. palatability.

   c. marbling.

   d. quality.

6. Characteristics evaluated in determining the cutability grade of beef include which of the following?

   a. hot carcass weight.

   b. conformation.

   c. marbling.

   d. palatability.

7. The cooking method of display is designed to

   a. remind the patron of other cuts of meat that may be prepared in the same manner.

   b. display all the cuts of each type together.

   c. add eye appeal to the display cases.

   d. remind the patron of an existing need or to suggest a new item.

8. Display groupings in the carcass method of display include

   a. broiling cuts such as steaks, chops, ham slices, chicken parts, whole broilers, and ground meats.

   b. retail cuts of beef such as steaks, roasts, tenderloin, pot roasts, ground chuck, and ground beef.

   c. white meats such as chickens or turkeys interspersed between red cuts of beef and lamb.

   d. meats for roasting such as rib roasts, roasts of beef, leg of lamb, pork roasts, hens, turkeys, and hams.

9. The basic requirement for establishing prices of meats in the commissary store is

   a. the weight of the carcass or wholesale cut.

   b. a balanced movement of processed cuts.

   c. the quality and grade of cuts.

   d. consistent cutting tests.

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10. Pricing charts were developed to

    a. eliminate repetitive cutting tests on fast-moving items.

    b. confirm prices established by cutting tests.

    c. determine the wholesale cost of carcass meats.

    d. standardize cutting procedures used in performing cutting tests.

11. The meat market pricelist is prepared by the

    a. meat market manager.

    b. commissary store manager.

    c. commissary officer.

    d. Defense Personnel Support Center.

12. Meat market prices must be adjusted periodically to

    a. permit flexibility in the operation of the meat market.

    b. control gains or losses effectively.

    c. offset a gain or loss on another type of meat.

    d. allow for special meat cuts required by recurring patron demand.

13. In planning the operations of the retail sales area, the meat market manager must determine the

    a. most popular mix of items to be sold in the market.

    b. type and number of patrons to be served.

    c. results of cutting tests performed in the market.

    d. grades and weight ranges of the items to be sold.

14. Requirements for authorized meat items to be sold in the meat market are determined by the

    a. Defense Personnel Support Center.

    b. commissary store manager.

    c. commissary officer.

    d. meat market manager.

15. Meat of questionable condition is set aside for inspection by the

    a. meat market manager and the installation surgeon.

    b. commissary officer and the meat market manager.

    c. installation veterinarian or the installation surgeon.

    d. commissary officer and the installation surgeon.

16. At what time must carcass meats be weighed?

    a. Before processing.

    b. At the time of receipt.

    c. When placed in storage.

    d. After processing.

17. Humidity requirements vary for different types of meat. A separate cooler, providing low humidity, is required for storing

    a. poultry.

    b. luncheon meats.

    c. carcass beef.

    d. smoked meats.

18. Temperatures in the meat processing room should be maintained

    a. between 50° and 55° F.

    b. between 32° and 35° F.

    c. below 29° F.

    d. at 0° F.

19. The percentage of shrinkage generally incurred in boning meats is

    a. 10.

    b. 15.

    c. 25.

    d. 35.

20. Carcass beef which is processed into primal or subprimal cuts by the packer and sealed in plastic bags is called

    a. six-way beef.

    b. quartered beef.

    c. market ready beef.

    d. boneless beef.

21. Retail cuts of veal such as pocket veal roasts, riblets, and braising veal are processed from the

    a. shoulder of veal.

    b. breast of veal.

    c. loin of veal.

    d. veal flank.

22. The loin of lamb is processed as

    a. lamb steaks.

    b. pocket lamb roast.

    c. riblets.

    d. lamb chops.

23. Chickens which are more than 1 year old are referred to as

    a. broilers.

    b. fowl.

    c. roasters.

    d. fryers,

24. The edible parts of beef, veal, pork, and lamb that cannot be classified as regular cuts are called

    a. variety meats.

    b. chop suey.

    c. ground meat.

    d. stew meat.

25. Two types of variety meats which are similar in tenderness and texture are

    a. brains and liver.

    b. liver and hearts.

    c. brains and sweetbreads.

    d. tongues and liver.

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REQUIREMENT. Exercises 26 through 31 are matching exercises. Column I lists the names of various types or styles of boneless beef. Column II lists the type by number. Select the correct type number from Column II to match the style or type listed in Column I.

Column I	Column II
26. Tenderloin Steaks	a. Type I
27. Swiss Steaks	b. Type II
28. Chuck Roll (Blade End)	c. Type III
29. Inside Round	d. Type IV
30. Shoulder Clod	e. Type V
31. Top Sirloin Butt	f. Type VI

REQUIREMENT. Exercises 32 through 40 are true-false. Indicate your answer on the answer form by using A for TRUE and B for FALSE.

32. In a one-hundred-percent patron self-service meat market, items are processed, weighed, wrapped, and priced by meat market personnel when requested.

33. Each beef carcass inspected by USDA is stamped with a cutability stamp indicating the yield grade for the carcass.

34. The carcass method of display groups the retail cuts of meat according to their method of preparation.

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35. When meat items are to be purchased locally, requirements must be submitted to DPSC 45 to 60 days in advance.

36. To produce quality ground meats, grinding should be done at the lowest chill temperature possible.

37. All frozen meat should be stored at 6° F. and should be thawed at room temperature.

38. Center slices may be removed and sold separately from hams weighing under 12 pounds.

39. Because of their highly perishable nature, variety meats should be stored at 32° F.

40. The only tongues which may be procured for sale in the commissary store meat market are beef tongues.

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SLAB 387C

Single-Lesson Assignment Booklet:

COMMISSARY STORE PRODUCE MARKET OPERATIONS

This copy is a reprint which includes changes and corrections to the original edition.

U.S. ARMY QUARTERMASTER SCHOOL
FORT LEE, VIRGINIA

SUPPLY TRAINING CENTER OF THE ARMY SCHOOL SYSTEM

JANUARY 1972

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SLAB 387C Credit Hours: 3

LESSON ASSIGNMENT

SUBJECT	Commissary Store Produce Market Operations.
STUDY ASSIGNMENT	Lesson Text.
SCOPE	Produce market operatons, including ordering, storage, temperature and humidity, and prepackaging procedures for fresh fruits and vegetables; five basic commodity groups; display, handling, and merchandising techniques; and customer service versus clerk service.
OBJECTIVES	As a result of successful completion of this assignment, the student will be able to--

1. List and describe the ordering procedures for fresh fruits and vegetables at the installation level.
2. Explain the effect of temperature and humidity upon the storage qualities of produce items.
3. Outline the prepackaging methods common to the produce industry and commissary operations.
4. Point out the important characteristics of an attractive produce display.
5. Determine the most effective methods of ordering and handling produce items.
6. State the advantages of customer service versus clerk service produce departments.

7. List produce commodities into five basic use groups.

8. Describe the merchandising techniques used in the commissary store produce market.

9. List the basic principles of display for fresh fruits and vegetables.

LESSON TEXT

SECTION I

INTRODUCTION

1. GENERAL. The appearance of the produce market, to a great extent, creates an impression of the entire store. Fresh fruits and vegetables provide ready material for colorful and attractive displays. The methods used in ordering and handling produce items largely determine the attractiveness of the produce market. The effectiveness of mass display or attractive prices may be dulled by the presence of wilted, shriveled, spotted, or decayed produce. Commissary store patrons come from all geographical sections of the country and generally have a wider preference than the public in general. They like to choose fruits and vegetables not only from a wide range of different fresh products, but also from varying qualities and sizes of the available items. To provide such service, the produce market must maintain high standards for handling and processing produce items and exercise effective merchandising techniques to insure a rapid turnover of highly perishable produce items. The objective of the commissary store produce market is to offer patrons ample quantities of fresh fruits and vegetables at the lowest possible prices.

2. TYPES OF PRODUCE MARKETS. The type of produce market operated in the commissary store is dependent upon available personnel, equipment, and the requirements of the local installation. The two types of produce markets commonly found in Army commissary stores are as follows:

a. One-hundred-percent prepackaged self-service. This type of service is recommended for all commissary stores when adequate personnel and equipment are available. In this type operation, the patron selects from displays of preweighed and prepriced items which are prepackaged or may be put directly into the shopping cart without assistance from the sales clerk (fig. 1). The primary advantages of this service are as follows:

(1) Reduced congestion in the produce sales area and increased customer convenience by eliminating the necessity for patron to wait for items to be weighed, bagged, and priced by sales clerk.

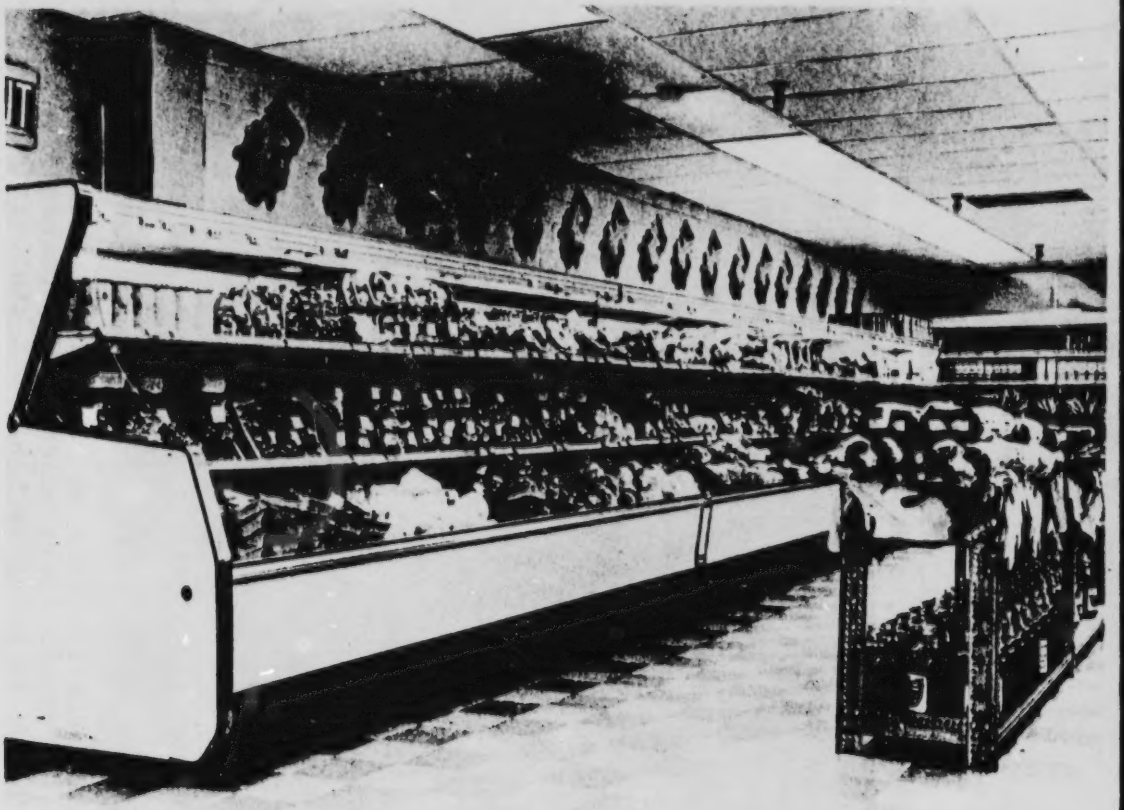


Figure 1. One-hundred-percent prepackaged self-service produce display.

(2) Decreased display damage because patrons are less inclined to handle prepackaged items excessively.

(3) Eliminated weighing stations and reduced rework time required for display cases.

(4) Reduced shrinkage and spoilage. Effective packaging retains moisture and keeps out decay bacteria.

b. Patron self-service, clerk pricing. In this type of produce market, the sales clerk is available in the department at all times to assist the patrons in selecting the items and to weigh, bag, and price purchases. This type of service is used in extremely small stores not having adequate personnel or packaging equipment available. Advantages of this service are that sales clerks are available for customer service and more personal attention can be given to displays.

3. LOCATION AND LAYOUT. In many instances, a store may be accepted or rejected by customers solely on the appearance of the produce market and the quality of the produce items offered. Therefore, the location and layout of the produce market should be planned for customer convenience and eye appeal. Consideration should be given to traffic patterns and accessibility of display cases.

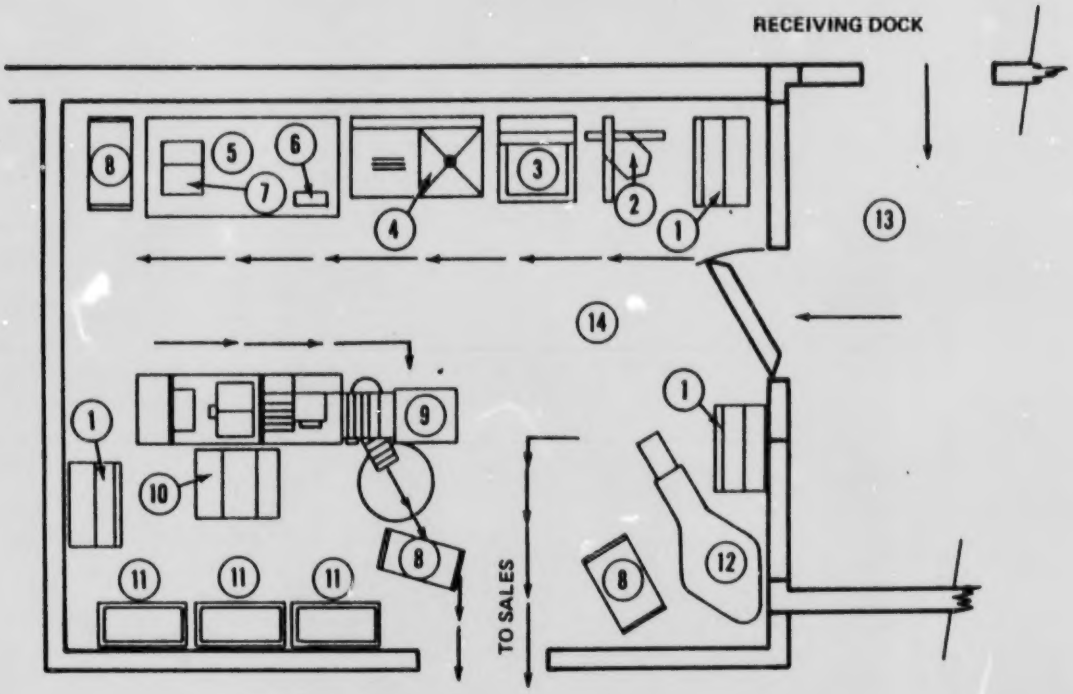
a. Location. In most cases, the produce market is located near the front entrance along the front or side of the store. This arrangement allows the patron to shop for fresh produce first and to plan shopping in other departments around these items. Since first impressions are usually lasting, an attractive display of fresh fruits and vegetables to greet shoppers as they enter the store can do much to build an impressive store image and generate good will with the patronage. Sometimes the produce market may be located near the exit on the perimeter of the store. This allows the shopper to purchase fresh fruits and vegetables near the end of his shopping period. The delicate items can be placed at the top of the shopping cart to prevent damage during handling.

b. Layout and design. Factors to be considered in planning the layout and design of the produce market are traffic flow, ease of accessibility, customer convenience, and eye appeal. The bulk storage, processing, and retail sales areas should be adjacent or in the nearest possible proximity to each other.

(1) Storage area. Improper and unplanned storage of merchandise is one of the greatest single sources of wasted time and effort in retail produce markets. The storage area should be located adjacent to or near the processings and retail sales area and should be designed to facilitate traffic flow and minimize congestion and bottlenecks. Space should be allotted for each type of merchandise with new shipments and items on hand segregated. In coolers, one wall should be designated for new merchandise and the opposite wall for items on hand. Shelves should be provided for small items.

(2) Processing area. The produce processing area (fig. 2) should be located adjacent to the produce sales area and within easy access of the bulk storage area. Work flow should be from right to left in a straight-line flow to minimize excessive steps and backtracking. In most instances, the layout and equipment placement must be tailored to the space available and the building configuration. The three most important work places are the trimming area, the packaging and pricing stations, and the bagging area. Compact working areas should be provided for each operation with all necessary materials, tools, and equipment within easy reach of the operator. There should be holding space for both the unprocessed and processed product adjacent to each station. The trimming station should have a conveniently located sink with wire baskets for washing the produce items. Racks should be provided at each station to hold the produce crates at the proper height and working position. Bins should be provided for bagging operations, and scales should be located with stands at the proper working height and position. Operators should not have to stand in aisles or passageways. Storage space or bins should be furnished for all waste and salvage at the point where it collects. In a bulk produce operation, waste depositories should be near the door to the sales area; in a prepack operation, depositories should be near the packaging stations. Boxes and crates should be collapsed or nested to conserve space and improve handling, and garbage should be collected in cans or barrels. Adequate lighting should be provided throughout the processing area to facilitate inspection during trimming or packaging and to insure quality products. Proper temperature and ventilation preserves the quality of stored merchandise and improves the productivity of clerks.

(3) Produce sales area. Display cases should be arranged to permit a smooth flow of traffic, allowing the



1. V-top cart
2. Produce trimming machine
3. Disposal
4. Sink, 51 by 27 1/2 inches
5. Table, 72 by 30 inches
6. Electric sealing plate
7. Scale, 30-pound capacity
8. Delivery and storage cart with casters, 5 shelves
9. Automatic weighing, handwrap shrink tunnel
10. Handwrap station
11. Delivery and storage rack with casters, 5 shelves
12. Bagging machine
13. Prefabricated, walk-in refrigerator
14. Processing area

Figure 2. Suggested layout for a produce processing area of a class 18 ($180,000 monthly sales) commissary store.

shopper to progress through the department without backtracking. Aisle space should be sufficient to prevent congestion and permit adequate shopping. Displays should be designed so that all merchandise is readily accessible and within easy reach of the patron. When the layout of the produce sales area is planned, provisions should be made for feature displays between the regular display cases and for extension displays which would project from the regular cases.

4. PERSONNEL. The produce market is staffed by the produce market manager and the number of assistants required to accomplish the mission of the department. Assignments and duties may be consolidated or expanded, and the number of persons may be increased or decreased as dictated by work requirements. The duties of personnel may be adjusted to conform to local requirements. The basic position and primary duties of personnel required in the operation of the produce market are as follows:

a. Produce market manager. The produce market manager works under the supervision of the commissary officer and the commissary store manager. His primary responsibility is to insure that ample supplies of fresh fruits and vegetables are available at all times to satisfy patron demands. The produce market manager plans and directs the operations of the department and supervises the receipt, storage, processing, and display of produce items within the department. In addition, he is responsible for establishing production schedules, work assignments, and training schedules for produce market personnel. The produce market manager also assists the commissary officer in establishing and adjusting prices for produce items.

b. Produce clerks. Produce clerks are engaged in such activities as receiving, processing, and merchandising produce.

(1) Receiving. The duties of produce clerks when shipments are received include consolidating merchandise on hand and preparing storage space for new shipment, checking the shipment for quantity and quality, unloading and segregating types of commodities, code dating new merchandise, and moving merchandise promptly into proper storage areas to avoid loss of freshness and bloom.

(2) Processing. Processing operations performed by produce clerks include cleaning, trimming, packaging, and pricing of produce items.

(3) Merchandising. Merchandising duties of produce clerks include arranging produce displays, adjusting prices, policing displays, and performing customer services.

c. Qualification and training. Civilian workers are used in the retail activities of commissary stores to the maximum extent possible. Intermittent or part-time personnel may be employed, as required, subject to existing directives.

(1) Qualifications. The key to successful produce market operations lies in the proper selection and training of personnel. Employees selected for the produce market should have some background knowledge or understanding of produce market operations.

(2) Training. Initial training for all new employees, regardless of previous experience, should include complete orientation on the purpose and mission of commissary stores and specifically on the mission of the produce market. In addition, new employees should be given instructions in job performance, health and sanitation, and appearance. Job performance training should emphasize courteous and efficient service to all patrons. Health and sanitation are critical areas in commissary work, and employees should be informed of their responsibilities in these areas. The cleanliness and neatness of personnel are two of the most noticeable features of any food establishment. High standards of cleanliness and appearance should be stressed in employee training. New employees should be given specific detailed training for their particular jobs. Standard procedures to accomplish specific tasks should be established and incorporated into Standing Operating Procedures (SOP's) within each commissary store.

5. SALES SPACE ALLOCATION. Sales space allocation is based on past sales records. Approximately 11 percent of the total sales space is assigned to the produce market. To determine the amount of display space required for each produce item, the produce manager must analyze past sales volume records. Sales space is allocated to each produce item in proportion to the percentage of total produce sales for that item.

SECTION II

OPERATING PROCEDURES

6. **PLANNING.** The produce market manager is responsible for the overall planning of produce market operations. Because of the perishable nature of fresh fruits and vegetables and extremes in market trends, availability, and price, effective planning is essential to the efficient operation of the department. Factors such as frequency of delivery, availability of product, processing required, and the storage and display life of the individual items must be considered. The objectives in planning produce market operations are to improve the quality of produce displayed, give the customer better service, reduce waste, make work easier and more satisfying, sell more produce, and decrease costs.

a. Requirements. Produce market requirements are based on patron demand, storage and display life of individual items, frequency of deliveries, availability of product, availability of storage space, and item consumption experience. A record of produce items received and sold should be kept as a guide in determining requirements. The record should indicate the opening inventory, quantity received during the week, and end of week inventory to determine the weekly consumption. Records may be maintained on working copies of receipt forms or on locally reproduced forms. As an aid in determining requirements, produce market managers should refer to the current produce availability forecasts which are published periodically by the Defense Personnel Support Center (DPSC) Subsistence Regional Headquarters. These forecasts are based on normal growing and weather conditions within the United States. Comparable information is usually disseminated by central procurement agencies in oversea commands.

b. Sales. The produce market manager must determine the types and variety of produce items to be sold in the produce market. Consideration must be given to display space available, past sales volumes for each item, customer requests, and availability forecasts. Feature displays should be planned for seasonal or promotional items, and effective use of high demand items should be planned to promote full department shopping.

c. Scheduling. Scheduling, or planning ahead, is the first and most critical step in managing a produce market.

Effective scheduling is essential for maximum use of personnel and a smooth flow of merchandise to the display cases. In planning a production schedule for processing operations, the produce market manager must keep in mind the shelf life of the product, the turnover time for the items sold, the lag time (time required to get the product ready for sale and on display), full use of employee's time, and the amount of produce which must be reworked for return to display. The production schedule is based on the movement records and lag time required for each commodity. The weekly work schedule and daily assignment of tasks should be developed to meet production needs with a minimum backlog and maximum use of available personnel.

7. ORDERING PRODUCE. Since most of the items sold in the produce market have peak seasons, ordering produce is an important operation. The primary considerations in ordering produce are what to order, quantity to order, sources of supply, and when to order. To a great extent, the methods used in ordering and handling fresh fruits and vegetables determine the effectiveness of produce market operations.

a. What to order. In determining the types and varieties of fresh fruits and vegetables to order, the produce market manager must consider the following factors:

(1) Customer preference. High demand items, such as lettuce, potatoes, tomatoes, cabbage, onions, oranges, and apples have wide acceptance and provide a basic foundation for the produce market. However, because military families come from all geographical sections of the country and generally have a wider preference than the general public, the commissary store produce market should offer a maximum variety of produce items for customer selection. Patron suggestions should be encouraged to provide essential information on customer preference.

(2) Availability. The seasonal and regional characteristics of fresh fruits and vegetables determine both the availability of the item and the price. Apples have a fairly constant availability with the exception of the summer months and a seasonal peak in October. Although lettuce is almost constantly available, the price and quality may be affected by weather conditions. Cranberries, on the other hand, are strictly seasonal and are available only in the fall and early winter months. Availability forecasts are published periodically by DPSC for use as a guide to seasons and availability of produce items.

(3) Value. Value means the best buy for the price paid. This is the primary mission of the commissary store. Therefore, value is an important factor to consider in ordering produce items. Although customers tend to remember quality much longer than they do price, many commissary store patrons must consider price first because they are in the lower grades with limited budgets. A balance must be maintained between price and quality which will provide top value for all commissary store patrons.

b. Quantity to order. To determine quantities of produce items to order, weekly movement records should be used. These records should list each item and show the beginning inventory, daily sales, and closing inventory. Based on these records, quantities should be limited to amounts necessary to maintain adequate displays. Excess merchandise increases the age of all items sold, and overcrowded storage areas cause difficulty in getting to items which results in extra handling. Other factors affecting the quantity of produce ordered are anticipated increases for paydays and holiday periods.

c. When to order. Weekly sales must be anticipated, and ordering should be planned for a good work schedule. Certain less perishable items, such as potatoes and apples, require extra work, and should be ordered so they will be received in the store early in the week to permit the work to be done in advance of need. Perishable items such as lettuce, tomatoes, and celery should be ordered so they will be received near the date of most sales. A key factor in determining when to order produce items is to know when supplies are received by the supplier.

d. Sources of supply. The two primary sources of supply for commissary store produce market items are the DPSC and local vendors.

(1) DPSC. DPSC buys fresh fruits and vegetables in carload lots in seasonal areas and can usually sell them at low prices. The produce manager reviews the current multiple line requisition form for availability of required items and furnishes the necessary data for items to be requisitioned. The requisition is submitted 48 hours before the items are needed unless a carlot quantity of a specific item is requested. Then the requisition must be received on or before the 25th of the month for produce to be delivered in the second succeeding month.

(2) Local procurement. Local procurement may be authorized for locally in-season items which are usually available at a lower price or when a fast response delivery is required. Items not available from DPSC may also be authorized for local procurement. If supplies are to be purchased locally, the installation contracting officer provides the necessary purchase and receiving documents, and the commissary officer may be appointed as ordering officer. Supplies authorized for local purchase are procured on an f.o.b.-destination basis.

8. RECEIVING AND INSPECTING PRODUCE. Produce may be received at the installation cold storage facility, or it may be received directly into the produce market.

a. Receiving produce from warehouse. Produce items initially received at the installation cold storage facility are transferred to the commissary store produce markets at tag weight on an "as needed" basis. Supplies are transferred and tallied in on DPSC Form 2005 (Invoice/Shipping Document). If DPSC Form 2005 is not available, documentation can be made on a local form. The commissary officer may not transfer selected or preferred items from issue stocks for sale in the commissary store produce market.

b. DELETED.

c. Inspecting incoming shipments. All incoming shipments should be inspected jointly by personnel at the cold storage facility or the commissary store produce market and by installation veterinary personnel. Produce items should be inspected for quality and freshness, and each shipment should be checked against the invoice or shipping document for quantity. When it is necessary to reject or adjust a local purchase shipment, the installation contracting officer should be notified. Discrepancies in shipments of produce items furnished by DPSC should be reported to the DPSC Subsistence Regional Headquarters as soon as possible.

9. HANDLING AND STORING. Fresh produce, especially leafy green items, deteriorates rapidly when exposed to the

sun or other heat and is subject to freezing in cold weather. Produce items that require refrigeration should be moved to the storage refrigerators as soon after receipt as possible. Those commodities which do not require refrigeration, such as potatoes, onions, and bananas, should be moved to storage areas with appropriate temperatures as quickly as possible.

a. Preparation for receipt. In preparing for the receipt of produce supplies, the produce manager should estimate the number of skids, pallets, or pieces expected. Merchandise on hand should be consolidated to make room for the new shipment. One wall of coolers should be designated for new merchandise, and all old items should be moved to the opposite wall. This arrangement will reduce the necessity of code dating new merchandise. When stocks are consolidated in the cooler, those items to be trimmed or packaged for the basic setup should be loaded on skids or dollies for early morning movement to work areas. Adequate personnel and equipment should be available to handle the incoming shipment quickly and efficiently.

b. Handling fresh produce. Handling fresh produce should be held to a minimum to avoid bruising and damage. Since produce items contine to live after harvesting, proper ventilation, refrigeration, and humidity are essential to enhance their keeping qualities. Fresh fruits and vegetables should be moved into storage areas as quickly as possible to avoid loss of freshness and "bloom," especially if exposed to high or extremely low temperatures. When produce is unloaded, it should be segregated to eliminate further handling. Large loads of produce items should be moved on skids or dollies, and sides may be added for handling watermelons and bagged items. Fresh produce is highly perishable and should be handled carefully. Rough handling of fresh fruits and vegetables may result in considerable damage and serious loss of quality. The following general rules should be observed when handling produce:

(1) Rotating stock. When displays are replenished, old stock should be pulled to the front and top of displays and new stock should be placed to the rear and bottom. Slight retrimming of old stock gives it a fresh appearance and helps to move it more rapidly. Old stocks from the feeder area and cooler should be moved first.

(2) Handling ripe produce. Because ripe produce is extremely delicate and deteriorates rapidly, it should be handled with extreme care at all times. Produce should be

brought to display as it ripens in the feeder area or cooler, and ripe produce items should be sorted for display as new stocks are received. Riper or older items should be placed to the front of display and when held over, should be refrigerated to maintain a salable condition. Overripe or unsalable items should be reduced in price and located in an area reserved for marked-down items for quick sale. These items should never be mixed with fresh produce nor should they be placed on top of fresh produce.

(3) Care during closed periods. Display cases should be cleared during periods when the store is closed. All produce should be removed from display and sorted to remove any decayed items. Fresh produce items or highly perishable fruits should be refrigerated. Display cases and mirrors should be thoroughly cleaned after produce is removed. When display cases are stocked on the next working day following the closed period, old merchandise should be placed on top of fresh displays.

(4) Handling bulk displays. Bulk displays of fresh produce items such as beans and spinach should be turned gently with hands and loosened thoroughly. Leafy items such as salad greens should be sprinkled before fluffing. Bulk displays of items such as lettuce, cabbage, celery, and carrots should be straightened frequently and all loose leaves should be removed.

(5) Handling fruit displays. Fruit displays must be checked constantly for cracked or leaky items which attract flies and detract from the appearance of displays. Broken or leaky fruit should be removed as soon as the condition is noticed, and displays should be straightened frequently.

c. Storing produce supplies. At the installation level, storage should be kept to a minimum required to prevent supply failure. However, to accomplish the mission of the produce market, some storage will always be required. Important factors to consider in storing fresh fruits and vegetables are as follows:

(1) Refrigeration. Refrigeration is the best method of preserving fresh produce because it slows the respiration process. For example, strawberries respire approximately 10 times faster at 70° F. than at 32° F. Respiration is the osmotic and chemical process by which a

plant absorbs oxygen and gives off gases (especially carbon dioxide) formed by oxidation in the plant tissues, resulting in deterioration and loss of quality. Generally, the lower the rate of respiration, the slower the loss of quality. Items displayed in produce markets do not require the low temperatures necessary for extended storage, however, some refrigeration is recommended to keep it fresh. All fresh fruits and vegetables are damaged by freezing, but not all of them freeze at the same temperature. Most fresh fruits and vegetables freeze at temperatures between 27° F. and 31° F. and will keep longer at temperatures slightly above their freezing point. Certain produce commodities, however, may develop chill injury when stored below certain temperatures for periods of time ranging from a few hours to several days. For refrigerated storage, produce commodities are divided into four basic groups. General care and refrigeration principles suitable for each group are as follows:

(a) Group I--citrus fruits. Generally, refrigeration is desirable for storing fresh citrus fruit. However, most citrus commodities may be held 4 or 5 days at room temperature without material deterioration. If display refrigeration is not available, citrus fruits benefit from storage overnight in coldrooms. The temperature range for storing fresh citrus fruits is 40° to 50° F.

(b) Group II--bananas. Green bananas ripen at temperatures of 62° to 70° F. in a relative humidity of 85 to 90 percent. After ripening, bananas may be held for brief periods at temperatures ranging from 56° to 60° F. Ripe bananas are extremely perishable and should be sold as soon as possible after ripening. Both green and ripe bananas are extremely susceptible to chilling.

(c) Group III--other fruits. Group III includes all fruits except citrus fruits and bananas. Storage temperatures of 35° F. are satisfactory for apricots, cherries, grapes, nectarines, peaches, and plums. Temperatures from 40° to 50° F. are best for apples, avocados, mangoes, melons, and pineapples. Pears should be stored at 29° to 31° F. The importance of careful handling of fresh fruits cannot be overemphasized, particularly those in group III.

(d) Group IV--fresh vegetables. Fresh vegetables have a high moisture content and require both temperature and moisture control while on display or in storage. Vegetables in group IV require the addition of moisture

to prolong their life and should be sprinkled lightly with water when they are displayed unpackaged.

(2) Humidity. Since most fresh fruits and vegetables are very high in moisture content, they require high humidity for storage to avoid loss of moisture to the air. Loss of moisture results in wilted, shriveled, and unattractive produce. As a general rule, the relative humidity in the chillroom should be approximately 90 percent. Since relative humidity is dependent on temperature, fluctuations in temperature should be held to a minimum to avoid condensation of moisture on the items which increases the favorability for micro-organism growth.

(3) Ventilation. Because of the gas byproducts produced by fresh fruits and vegetables during the respiration process, ventilation or air circulation is necessary to keep these byproducts from causing damage or hastening ripening. Ethylene gas is a byproduct of bananas and apples and acts as a ripening agent for apples, bananas, and pears. Air circulation also prevents the absorption of musty storage odors. Fresh fruits and vegetables that are to be held for more than a day or two require ventilation within the stack. Usually, these items can be arranged with open spacing in the stack so that the contents may be cooled satisfactorily and gaseous vapors may be carried away. Thin boards or wooden laths placed between the tiers of a stack permit equal distribution of refrigeration throughout the stack and allow stacking to an economical height. White potatoes, sweet potatoes, and onions store well in ventilated storage.

(4) Space utilization. Storage areas should be designated and cleared for shipments in advance of delivery. These storage areas and the aisles leading to them should be marked off to fit the handling equipment used. Shelves should be provided for small items, and merchandise should be moved directly into storage spaces without rehandling. Space should be left between or in front of the pallets, skids, or stacks for breakdown of mixed items, and small, loose, or single items should be moved immediately to proper shelves and coded. Stacks should be kept neat during the workday, and skids or pallets should be removed as they become empty. On mixed skids or pallets, the crates on top of needed merchandise may be set aside in breakdown areas between or in front of stacks. These items may have to be restacked from time to time as space becomes available. Date codes should be watched carefully so that merchandise is used on a first-in first-out

basis. The "old" side of the cooler should always be checked before using new merchandise.

10. SCHEDULING OPERATIONS. Scheduling, or planning ahead, is the first step in managing a produce department. Effective scheduling is not easy, but it is the only way a produce manager can make the best use of his personnel and accomplish the work of the department. The scheduling of produce market operations is divided into two major areas: effective control of produce and effective use of personnel.

a. Scheduling produce. When scheduling the movement of produce items, the produce market manager must consider the shelf life of the product, the turnover time, the lag time (time required to get the product ready for sale and on display), the effective use of personnel, and the amount of produce which must be reworked for return to display. In departments where produce is packaged, wrapping, bagging, and price marking must be done before the items are needed on display. However, packaging should not be done too far in advance or spoilage may develop. Careful records should be kept at all times to give full consideration to these factors.

(1) Movement records. Daily or weekly sales records of individual items should be maintained. The quantity of each item sold should be recorded at the end of each day or week, depending on the product. Regular store inventory records are used to obtain weekly movement rates, and production sheets can be used to obtain daily movement rates. These records are essential for the effective scheduling of produce items.

(2) Lag time. The production lag time is the average time required to package, price-mark, and display each of the major commodities. The lag time should be determined for each produce item handled. Lag time for such items as lettuce, cabbage, and corn will be a fairly constant figure that can be used each time a schedule is made for the work force. However, these times should be rechecked from time to time so that schedules may be adjusted accordingly.

(3) Production schedule. The production schedule (fig. 3) is based on the movement records of produce items and the average time required to process and prepare the items for sale. With these figures, the produce manager can determine the items to package, the order of packaging, and the time each item must be ready for display. Production

PRODUCE PRODUCTION SHEET

Date 6 Sept

Item	Unit	Price	Unused carryover	Daily production ordered				Produced
				For setup	A.M. 9-12	P.M. 12-3	P.M. 3-6	
Celery, pascal	lb.	.08	1½	3	2	2	1	||| ||
Celery, white	bun.	.12	½	1	1	1	—	||||
Lettuce	lb.	.09	—	3	3	3	2	||| ||| |||
Apples, del.	lb.	.10	1	2	2	2	—	||| |||
Apples, wsap.	lb.	.08	1	2	2	2	—	||| ||| 1
Pears, bosc.	lb.	.11	½	1	1	—	—	||

Figure 3. Produce production schedule.

schedules should be used to list the items to be packaged or prepared for sale and should provide space for employees to check the carryover items and record the work completed so that daily sales of individual items can be determined. When detailed work such as trimming, packaging, or price marking is scheduled, items should be alternated so that a mixture of products is produced. Working one product too long tends to unbalance production, causing holes to develop in displays and extending the age of all produce prepared. An accurate record should be kept of all packages returned to the back room for rework. The record should indicate the item, the number of packages returned, and the reason for return. Packages should be code dated so that the age of any package can be easily determined. A high percentage of rewraps for any item may indicate too large a display, poor quality, or improper grading. An excessive number of broken packages may require new packaging methods or new materials. An inventory of packages left on display at the end of each day can assist the produce manager in controlling production and improving production schedules.

b. Scheduling personnel. When the produce manager has determined the work to be done and the time when the work should be completed, the next step is to delegate specific tasks to each employee. Once the daily task assignments have been made, a weekly work schedule should be prepared to make the best use of available personnel.

(1) Daily task assignment. Task assignments for individual employees provide a list of jobs to be performed throughout the day. Effective use should be made of natural abilities and training. Production and lag time should be checked and accurate time allotted for each task. Adequate personnel should be assigned to insure completion within allotted time. Separate operations such as trimming and pricing should be scheduled so as to keep production moving. Some backlog may accumulate in certain operations, however, effective balance of work between operations or shifts can help to prevent backlogs.

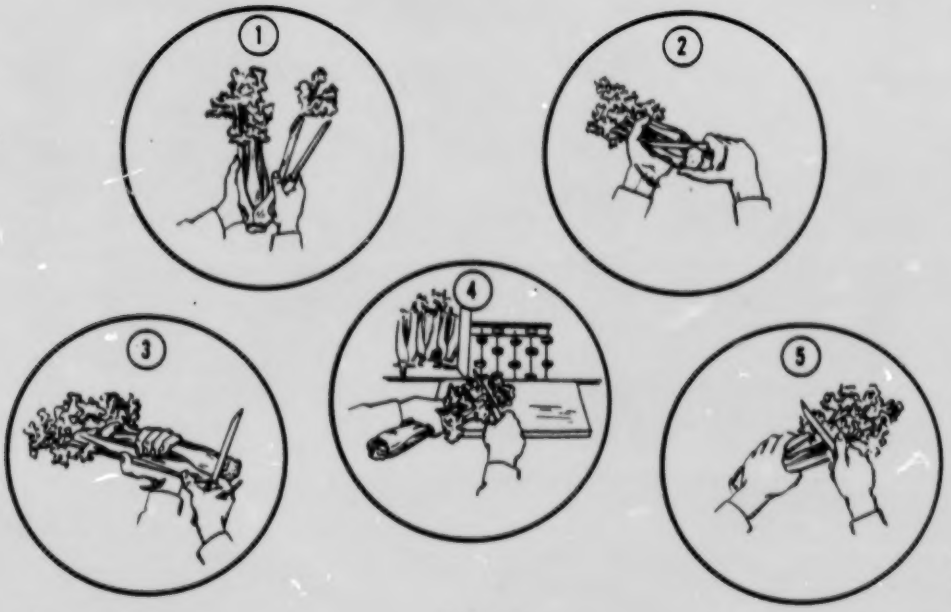
(2) Weekly work schedule. The weekly work schedule specifies when an employee is to report to work and leave work and assigns his break and lunch periods. The schedule should arrange employee rest periods so that someone is on duty at all times. Adjustments may be required in order to give each person a reasonable weekly schedule. However, the work schedule must be based on production needs rather than employee convenience.

11. PREPARING PRODUCE FOR SALE. Most produce items require some preparation before being displayed for sale. The outer leaves and stalks are usually left intact by growers for protection during shipping and handling. Therefore, many items must be trimmed and cleaned before being displayed, and some fruits may require ripening. Prepackaging of various kinds of fresh fruits and vegetables has increased during recent years following a trend toward complete self-service in food stores. Control over packaged produce to insure freshness and to prevent sale of off-condition items may require a system of package coding.

a. Cleaning. Produce may be cleaned by washing in cold water, by wiping with a soft clean cloth, or by brushing. The method of cleaning is determined by the nature of the item. Washing produce to maintain and improve quality before it is placed on display is a common practice in most produce markets. Washing with cold water not only cleans but freshens produce. Careful handling of produce during washing is essential to prevent unsightly bruises, cuts, and broken stems or leaves. The washing water should be kept clean to prevent spreading disease organisms throughout the lot.

b. Conditioning. Fresh fruits and vegetables displayed in the produce market are living on borrowed time. Aging and other deterioration are continuous processes, the rate depending upon the commodity and the conditions under which it is held. Most fruits and vegetables are near or at the prime of life when harvested, and they continue to live even after separation from the parent plant. The length of the post-harvest life depends largely upon temperature, moisture, and care in handling. Certain wilted vegetables can be revived with cold water; for example, asparagus stalks revive when placed in water, and leafy greens take on renewed freshness when sprinkled periodically with water. Unripe fruits may be ripened before being displayed for sale by keeping them in storage at room temperature.

c. Trimming. Most produce requires some trimming regardless of the method of merchandising. Certain vegetables are trimmed for display by removing damaged outer surfaces, removing part of the butt to enhance the appearance, and in some instances, removing outer leaves or covering so that the product can be seen better (fig. 4). Adequate working facilities and proper trimming methods improve the quality of produce, save time, and increase safety in trimming operations.



Celery

Corn

Figure 4. Steps in trimming produce.

(1) Work area. A suitable workplace adjacent to the cooler should be provided for trimming produce. A crate holder or rack designed to hold several crates of produce should be located close to and in front of the operator. Crates should be positioned on the rack at a 45° angle to provide easy access to produce. A receptacle for trimmings should be located directly below the crate holder, and containers for trimmed produce should be positioned to the left of the operator with separate space for each grade. A small sink with wire baskets for washing produce should be conveniently located. Tools and materials should be neatly stored and positioned conveniently for use. Quick-acting controls for disposal machines should be accessible to the operator, and storage for trash and salvage should be located nearby.

(2) Work schedule. Work should be scheduled for the trimmer in advance. In small markets, trimming may be less than a full-time job for one man, and the work should be scheduled so that this same person may be assigned other tasks. A record sheet which gives estimated needs and amount trimmed has proved advantageous in many markets. Such a record, if properly used, serves as a task assignment, prevents trimming too much or too little from produce, keeps track of retrims, and gives the manager a daily movement guide.

(3) Proper use of tools. A neat, clean trimming job cannot be accomplished with a dull knife. A sharpening stone should be kept handy, and knives should be kept sharpened at all times. Knife cuts should be made by twisting or turning rather than chopping or hacking, and the knife should be under control of the operator both entering and leaving the product. The thumb should not be placed in front of the knife blade, and cuts should never be made towards the body.

(4) Proper handling. Produce should be trimmed from the original box or crate. Dumping the produce out may knock off extra leaves and damage the product. Large or leafy items should be handled with both hands to avoid loss of leaves. Smaller items may be rolled out of the case with one hand, however, items should not be flipped or regrasped during trimming. Grades should be segregated as trimming progresses, and trimming motions should be combined so that the last motion of the trimming operation places the item in

its proper container. Tying or packaging may be combined with trimming to avoid rehandling the product.

(5) Retrimming. Approximately one-fourth of the trimming job is retrimming merchandise that has been on display. Items to be retrimmed should be kept separate from other items and stacked at the top of container so that they can be easily seen. The trimmer should check the retrims for both quantity and quality before trimming new produce. All retrims should be done at one time, immediately after the basic counter setup of new merchandise is completed. Retrimmed merchandise should be returned to display and placed on top of new merchandise as soon as possible.

d. Packaging and marking. Most commissary store produce markets today are one-hundred-percent prepackaged self-service operations in which the patron selects from a variety of prepackaged and prepriced produce items. The extent to which produce is placed in packages may vary. Some produce markets wrap all produce in some type of protective cover; others package as few items as possible and unit-price or code other items. The types and sizes of packages also vary greatly. The two most common types of packages found in commissary store produce markets are film-wrapped packages and bags. The package label bears a code indicating the day the item was packaged. All items processed for sale through the produce market must also be properly marked to identify them as produce market items.

(1) Packaging. Packaging produce helps to increase produce sales and reduces shrinkage by providing protection against rough handling and loss of moisture. Customers often prefer to buy their produce prepackaged because intermediate stops for weighing or pricing before checkout are eliminated. By packaging produce at a slack time rather than during peak sales periods, the operator workload is lightened and scheduling problems are eased. The important thing to remember in packaging produce is to provide adequate ventilation and refrigeration. Methods generally used for packaging produce are given below.

(a) Overwrapped backing board. In this method of packaging, produce items are placed on a corrugated or hard paperboard backing and overwrapped with polyethylene film or cellophane. Film should be ventilated with punched holes. The packaging time required is about the same as that required for tray overwrap ((b) below), but the cost is less.

Overwrapped backing board does not withstand as much rough handling as the overwrapped tray, but it gives better visibility.

(b) Overwrapped tray. This type of package has a better initial appearance and greater resistance to repeated handlings. The produce items are placed in a paperboard or styrofoam tray and overwrapped with polyethylene film or cellophane. A machine-printed label may be prepared with a label activator and attached to the finished package (fig. 5). The film overwrap should be ventilated with punched holes. The use of trays in packaging produce is particularly adapted to such items as beets, brussel sprouts, corn on the cob, and cucumbers. The tray package has proved successful because it presents produce in a colorful container and the produce is easily displayed and visible for inspection.

(c) Sleevewrapped tray. This is the most economical method for wrapping a typical six-unit package. It is especially suitable for such items as apples, pears, oranges, plums, and corn. For this package, six pieces of fruit or vegetable are placed in the proper size tray. The tray is then wrapped with a sheet of film or cellophane which extends to each end of the tray forming a sleeve. The open ends of the sleeve provide adequate ventilation for the package and saves on both film and labor. The tray, however, must be exactly the right size or the produce may roll out of the open ends. It is not always practical to have a sufficient variety of tray sizes on hand; therefore, the use of sleevewrapping may be limited by the variety of tray sizes available.

(d) Film overwrap without tray or board. This is the least expensive method of packaging produce, but it does not lend itself to all produce items. Items such as cabbage or lettuce may be overwrapped with film or cellophane without the use of a tray or backing board. The item is placed in the center of a sheet of polyethylene film or cellophane and the four corners are folded together in the center and sealed with a hand iron. A hand or machine printed label is attached to the finished package (fig. 6). It is not usually necessary to ventilate the film in this method of packaging.

(e) Trays banded with tape. This method of packaging requires more labor than film sleeves ((c) above), but gummed kraft tape is the least expensive material. Items

1 Sheet of cellophane is placed over tray and contents diagonally.

2 Two opposite corners are tucked under tray. Tray is slid onto flush hot plate to seal the corners, tilting the package slightly.

3 Remaining two corners are tucked under and sealed.

4 Label is removed from label activator and pressed in place.

Figure 5. Tray overwrapping steps.

1 Produce is placed on sheet of cellophane, and one corner is lifted over, as shown.

2 Wrap is completed by rolling and folding ends of sheet around the product.

3 Seal is completed by sliding package onto flush-mounted hot plate; or if the package does not lend itself to this, the hand iron is used.

4 The label is affixed to the completed package.

Figure 6. Wrapping a head of cabbage.

such as grapes are placed in trays and a single band of tape is secured around the center of the tray to hold the grapes in place. Crepe-back tape may sometimes be used, but it is more expensive than gummed kraft tape.

(f) Tills capped with film sheets. This method is most economical when the product comes originally in individual containers such as trays or baskets. Ventilation through the container is usually provided. Items such as strawberries, cherries, plums, and sometimes tomatoes may be received in individual till baskets which can be capped with a sheet of plastic film and displayed for sale.

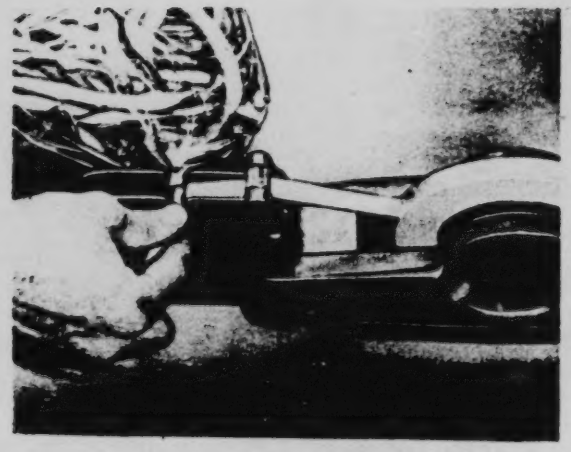
(g) Bagging produce. Many different types of materials may be used to bag produce: polyethylene, cellophane, and Kraft paper bags. Polyethylene bags are used for apples, citrus fruits, potatoes, and onions. They can also be used for beans, peas, squash, corn, and other vegetables, as well as for salad items, including lettuce and celery. Cellophane bags (fig. 7) are used for vegetables such as lettuce, celery, beans and spinach and for small soft fruits and nuts. Kraft paper bags have long been used for items such as potatoes and onions. Paper bags are also used for many fruits and vegetables which are sold in "open" units (3 for, 6 for, doz). Produce to be bagged must be the type that is not easily bruised because bags give little protection to soft items. Regardless of the type of material used, adequate ventilation for the product is essential. The best policy is to keep only ventilated bags on hand in the produce market.

(h) Banding. Many items may be packaged by banding. Usually items are tied together in retail quantities with a single band or kraft gummed tape or crepe-back tape. The kraft gummed tape requires a dispenser to wet the gummed side and cut the tape. Dispensers range from simple manual devices up to high-speed electric ones with a means of premeasuring lengths of tape. Crepe tape dispensers are usually manual. Items such as bananas, carrots, celery, and green onions lend themselves effectively to this type of packaging.

(2) Marking. There are many ways to price-mark and label packaged produce, varying from a stamped impression to machine-printed labels. There is also a wide variation in the information placed on the label. Some packages are marked with a standard price per package, others are weighed and then

1 Cellophane bag is set atop the flush-mount scale and filled to the desired weight.

2 Filling completed, the neck of the bag is twisted.



3 The twisted neck of the bag is inserted into the tape closure machine and sealed with tape.

4 The imprinted label is taken from the label activator and pressed in place on the side of the bag.

Figure 7. Bagging produce by hand.

price-marked. Label identification for packaged produce should include the price per pound, the weight, the package price, and a code indicating the day the item was packaged. Items must also be properly marked or color coded to identify them as produce market items to insure that the cash sales are credited to the produce market.

12. SANITATION AND SAFETY. The proper and efficient operation of the produce market requires the observance of strict rules of sanitation and safety. It is the responsibility of the produce market manager to insure that these rules are observed by personnel working in the produce market.

a. Sanitation. An ample supply of hot water (180° F. or above) must be available to clean handtools, equipment parts, display trays, and other like articles used in the produce market. A daily inspection should be made by the commissary officer or the commissary store manager to insure that the proper standards of sanitation and maintenance are met.

(1) Storage refrigerators and display cases. Storage refrigerators must be emptied, washed, and cleaned at least once a month, or more often if necessary. Produce display cases must be emptied, washed, and cleaned at least once a week with intermittent cleaning on a daily basis.

(2) Floors. Floors in the processing and display areas must be kept free of fruit and vegetable debris. They should be washed with appropriate cleaning agents at the end of each day and should be dried thoroughly.

(3) Scales and worktables. Worktables in the processing area and scales and weighing areas must be kept free of produce debris and must be cleaned daily.

(4) Salvage, waste, and garbage. Storage space or bins should be provided for all waste and salvage at the point where it collects. In a bulk produce operation, the storage should be near the door to the sales floor. In a prepack operation, it should be near the packaging stations. Boxes and crates should be collapsed or nested to conserve space and improve handling. Garbage should be collected in covered containers such as cans or barrels.

(5) Personal cleanliness. The commissary officer or his designated representative should conduct daily inspections of all produce market personnel, with special attention to cleanliness of clothing, hands, and fingernails.

Individuals showing evidence of colds, skin diseases, infected cuts, or other illness should not be permitted to remain on duty. All personnel must wear clean outer clothing. Garments such as T-shirts and undershirts should never be worn as an outer garment. Each worker should be provided with a clean, white, cotton drill, food handler's coat at the beginning of each day. All personnel must have their hair trimmed properly, and male personnel must be required to shave daily.

b. Safety precautions. Produce market personnel should observe the following safety rules.

(1) Hands should be kept a safe distance from power-driven blades or knives. Guides and guards for power equipment must always be used when provided.

(2) Personnel should never attempt to remove jammed or clogged items from a power-driven garbage disposal, trimmer, or wrapping machine while the equipment is in operation.

(3) Power-driven equipment should be operated and cleaned by experienced personnel only.

(4) As a safety measure, the electrical cord should be removed from the outlet when equipment is being cleaned.

(5) Trimming knives and hand irons should be stored in a proper receptacle when not in use.

(6) A dull knife can be dangerous. A sharpening stone should be conveniently located so that trimming knives may be sharpened.

(7) Hacking or chopping motions should not be used in trimming produce. The knife should be under control of the hand when it is entering or leaving the product.

(8) Arm muscles should be used to provide leverage when trimming so that cuts are made by twisting or turning rather than chopping.

SECTION III

MERCHANDISING

13. ESTABLISHING PRICES. Produce prices are influenced by item availability, harvesting season, and weather conditions. Scarcity or abundance of a commodity regulates the price of fresh produce more often than any other factor.

a. Policy. Prices used to debit the produce market subsection of the commissary officer's account depend upon the supply source of the produce. Prices for items listed in the Federal Supply Catalog C8900-SL are obtained from the Federal Supply Catalog Subsistence Price List C8900-PL, published by the Defense Personnel Support Center (DPSC). Nonlisted items procured from DPSC for resale and items procured locally for resale are debited to the account at the actual procurement price of the product. Selling prices must be sufficient to recover the total cost of all items debited to the produce market subsection of the account, less credits, during each accounting period.

b. Sales prices. Listed items are debited at a constant price during each accounting period; therefore, selling prices for these items need only be adjusted to compensate for trim loss, shrinkage, or spoilage. Selling prices for nonlisted and locally procured items are computed to recover the purchase cost of the items as shown on the supplier's delivery ticket, or invoice, or on the DPSC shipping document of each individual shipment. Prices are changed as often as necessary to recover costs and to compensate for trim loss, shrinkage, or spoilage. Figure 8 illustrates DA Form 10-253 (Processed Item Test) which is used as explained in the example below to make necessary adjustments for establishing sales prices.

(1) Six crates of lettuce are transferred from the issue commissary to the produce market. Each crate has a net weight of 45 pounds; the listed price is $0.10 per pound. Accordingly, the produce market subsection of the account is debited $27 (6 x 45 x .10), and the issue commissary account is credited for the same amount.

(2) The produce market must realize at least $27 from the sale of the item. The processed item test (DA Form 10-253) performed on this lettuce indicates that

PROCESSED ITEM TEST
(AR 31-200)

a. DESCRIPTION - ITEM AS RECEIVED: Lettuce Iceberg

b. TAG WEIGHT (No. lbs. and oz): 270

c. COMMISSARY PRICE LIST PER LB.: .10

d. COST OF ITEM (b × c): 27.00

DESCRIPTION - PROCESSED ITEM	WEIGHT LBS	WEIGHT OZ	% (f ÷ b)	CURRENT PRICE	$ VALUE (f × h)	ADJ. PRICE	$ VALUE (f × j)
	e	f	g	h	i	j	k
1 Lettuce	229	5000	85	.11	25.25	.12	27.54
2 Trim	27	—	10				
3 Waste factor	13	5000	5				
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
TOTALS	270	—	100		25.25		27.54

l. SHRINKAGE (b − f):

m. % SHRINKAGE (m ÷ b):

n. ☒ GAIN (k − d) .54 ☐ LOSS (d − k)

p. % GAIN OR LOSS ☒ (k − d ÷ d) 2% ☐ (d − k ÷ d)

TEST CONDUCTED BY: James Hill

DATE:

CONVERSION OF OUNCES TO POUND DECIMALS

1. — 0.0625	4. — .2500	7. — .4375	10. — .6250	13. — .8125
2. — .1250	5. — .3125	8. — .5000	11. — .6875	14. — .8750
3. — .1875	6. — .3750	9. — .5625	12. — .7500	15. — .9375

DA FORM JAN 61 10-253 REPLACES DD FORM 422 WHICH IS OBSOLETE.

Figure 8. Processed item test.

there is a 10-percent trim loss (10% of 270 lb. = 27 lb.). Based on previous experience, a 5-percent waste factor should also be applied for subsequent spoilage and display loss (5% of 270 lb. = 13.5 lb.).

(3) Initially, the selling price is established at $0.11 per pound. At this price, the net return on 229.5 pounds would be $25.25, or a loss of $1.75.

(4) The selling price is adjusted to $0.12 per pound. The return at this price is $27.54, resulting in a gain of $0.54.

c. Adjustments. The commissary officer is authorized to adjust prices of produce, as required, to avoid gain or loss resulting from overall operation of the produce market. To control gains or losses effectively, trial balances of the operation should be taken twice a month or more often if required. Analysis of the produce market operation should be tabulated on DA Form 10-254 (Weekly Record of Operation) and includes receipts of merchandise, cash and charge sales, and the biweekly inventory. Because of the difficulty in determining the causes of gains or losses reflected on DA Form 10-254, a slight markup or markdown on fast-moving items may be used to eliminate excessive gains or losses. However, markups on fast moving items may never be used to permit a price reduction for high-priced, out-of-season items, such as cherries and specialty melons.

d. Pricelist and pricing boards. The produce market pricelist is prepared by the commissary officer for each accounting period and reflects current prices for all items sold in the produce market. At the end of each accounting period, these pricelists are filed as a part of the commissary officer's account. In a patron self-service, clerk-pricing operation, a pricing board is installed in the sales area to inform patrons of current prices. Label identification and pricing eliminate the requirement for pricing boards in produce markets that have one-hundred-percent prepackaging.

e. Verification of prices. The produce market manager is responsible for insuring that prices marked on produce items or display cases are in agreement with pricelist prices. Fast-moving items and items subject to frequent price changes should be priced by the use of price tags affixed to the display cases. Slow-moving items are priced on the

package. The produce market manager should check with the cashiers frequently to insure that their pricelist for non-marked items is accurate.

14. PRODUCE DISPLAY. Display is largely an art and cannot be taught as an exact science. However, certain basic principles can be applied to increase the effectiveness of the display.

a. Principles of display. The following basic principles of display can be used effectively in the produce market.

(1) Bulk display. Produce may be displayed loose as opposed to packaged. This method can be used in conjunction with packaged items to provide the customer a choice.

(2) Mass display. Produce, bulk or packaged, is displayed in large quantities and together with like items to create the appearance of an abundant supply. Mirrors can be used as an aid to this type of display; however, to be fully effective, the display cases must be kept full. The sales volume of each item aids in determining the amount of display space necessary for the item. Displays should not be stacked so high as to cause damage and early spoilage.

(3) Variety. The customer should be allowed a choice of like items. Several different types of eating apples and cooking apples should be displayed, and different types of packages should be offered. Items with less demand, such as mushrooms, artichokes, and okra, should be prominently displayed and not hidden between larger displays.

(4) Color contrast. Since fresh fruits and vegetables provide a variety of living color for the display, the arrangement of contrasting or complementary colors can do much to enhance the attractiveness of produce displays. Items such as red and green cabbage present an effective contrast. Parsley, carrots, bib lettuce, and green peppers are complementary when displayed together. Other items such as tomatoes, celery, and radishes or head lettuce, cucumbers, and green onions provide interesting color arrangements. Fresh fruit displays should include arrangements such as red and green apples, white and red grapes, and seasonal items such as blueberries and strawberries or cherries.

(5) Tie-in items. Items in the meat and grocery departments are effective tie-ins for produce items to suggest uses such as:

(a) pork or souse and apples.

(b) ground beef for stuffed green peppers.

(c) almonds and fresh fish.

(d) honey and sweet potatoes.

(e) rice and tomatoes.

(f) peaches and chicken.

(g) chitterlings and corn.

(h) bananas and bacon.

(6) Lighting. Adequate and effective lighting for displays is very important. Lighting should be arranged to bring out the natural color of the items. Care should be taken not to use colored, artificial lighting which might distort the appearance of the product and mislead the customer. Also, damage to some items, such as greening of potatoes, may be caused by too much light.

(7) High demand items. Six basic items (bananas, apples, oranges, tomatoes, potatoes, and lettuce) account for approximately one-half of the total dollar sales in the produce market. These items can be effectively used to encourage complete department shopping. They should be located throughout the department and displayed in conjunction with slow-moving and seasonal items.

(8) Price display. Produce prices should be realistic, and they should be prominently displayed so that the customer can tell exactly what she must pay for each item. Many customers will pass the item up rather than ask the price. Price display should be an integral part of every produce display.

(9) Extra services. Since commissary stores do not advertise, extra services, such as product identification and preparation instructions, are important. All items, especially new or unusual items, should be identified

either on the package or at the display. New, or recommended, recipes for the preparation of items may be posted as an added convenience to the customer.

(10) Police. The constant and effective police of produce displays is essential to the maintenance of an attractive display area. Produce displays should be continually checked for decayed or spoiled items and items requiring retrim and repackaging. Display cases, mirrors, and floors in the entire department should be cleaned and polished regularly.

b. Display planning. Display space, location, and equipment required for each item should be carefully planned. How much to display, where to locate displays, how the display should be built, when to rotate, and when to remove old merchandise are some of the display decisions necessary in effective planning. Employees should be thoroughly familiar with the functions of refrigeration in slowing the life processes of fresh produce and maintaining top quality by retarding bacterial growth. They should know specifically which items must have refrigeration and which items do not. Table 1 indicates the suggested shelf life for produce items. Code dating of packages guarantees product freshness. Code systems may use punched holes, letters, or numbers. Table 2 gives the refrigeration requirements for prepackaged fruits and vegetables on display.

c. Display cases. Various methods are used to maintain desirable temperatures of fresh fruits and vegetables. Mechanically refrigerated and ice-bed cases maintain desirable temperatures during both day and night, and produce displayed in nonrefrigerated cases during the daytime may be stored at night in fruit and vegetable storage rooms or in iced produce barrels.

(1) Types of display cases. There are many different types of mechanically refrigerated display cases, including open and closed connection or gravity-flow and forced circulation types. Closed cases may be used advantageously in stores where produce is often held for several days before it is sold. In this type of case, temperature and moisture are more easily controlled than in open cases because the produce is less subject to drafts and changes in room atmosphere. The open-top case is more suitable for stores that have a rapid turnover and where it is desirable to have the produce more readily accessible to the customer.

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Table 1. Suggested shelf life

Packaged for 1-day turnover		
All green items*	Corn	Pears
All berries	Mushrooms	Tangerines
All grapes	Plums	Tomatoes
Cherries	Peaches	Sweet potatoes or yams
	Nectarines	

Packaged for 3-day turnover		
Apples	Radishes (bag)	Celery (if refrigerated)
Grapefruit	Green beans (if refrigerated)	Green peppers (if refrigerated)
Oranges	Broccoli (if refrigerated)	
Lemons		

Packaged for 5-day turnover		
All dry onions	Carrots (bag)	Turnips
Potatoes	Cranberries	Parsnips
		Winter Squash

* Except refrigerated green beans, broccoli, and green peppers.

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Table 2. Refrigeration requirements of prepackaged fruits and vegetables on display in produce markets*

Refrigeration highly desirable	Refrigeration desirable	Refrigeration not required (but beneficial)	Refrigeration not desirable
Artichokes	Apricots	Apples	Avocados
Asparagus	Beets, topped	Cucumbers	Bananas
Beans, snap	Carrots, topped	Garlic	Sweet potatoes
Beans, lima	Celery	Grapefruit	Tomatoes, pink
Berries	Celery hearts	Lemons	
Broccoli	Cherries	Limes	
Brussels sprouts	Grapes	Onions, dry	
Cauliflower	Okra	Oranges	
Cole slaw	Peaches, ripe	Parsnips	
Endive	Pears, ripe	Potatoes, white	
Kale	Peppers	Rutabagas	
Lettuce	Plums	Turnips, topped	
Mushrooms	Rhubarb		
Onions, green	Squash, summer		
Parsley	Tomatoes, ripe		
Peas, green			
Potatoes, peeled			
Radishes, topped			
Salad mix			
Soup mix			
Spinach			
Sweet corn			
Tangerines			

* This table was prepared to indicate degree of perishability and to suggest kinds of prepackaged produce that should be kept cool when refrigerated display space is limited. In stores without refrigerated display space, night storage in produce coldroom is desirable for the items (except berries) in the two columns on the left.

Prepared by the Quality Maintenance and Improvement Section, Biological Science Branch of the United States Department of Agriculture, Beltsville, Md.--May 1954.

Low temperatures and high humidity are easily obtained with proper use of the ice-bed case. The produce is arranged on a 3- to 5- inch bed of crushed ice each morning and covered with a layer of ice. Much of the cover garnish will soon melt and leave the produce fresh and crisp when the early customers arrive. A light garnish of crushed ice added at noon and at midafternoon will keep the produce cool and moist. Nonrefrigerated cases may be used to display fruits and vegetables that do not need refrigeration or that may be injured by low temperatures. These cases may also be used for other produce that is stored at night in iced produce barrels or in cold storage rooms. Most fruits and vegetables that will be sold during the first day may be displayed without refrigeration, but produce that does best at low temperatures should be kept as cool as available refrigeration will permit.

(2) Arrangement of display cases. The arrangement of display cases should be designed for customer convenience and smooth traffic flow. Aisles should be wide enough to permit adequate shopping but narrow enough to permit cross aisle shopping. Weigh stations (if used) should be convenient for customers and department personnel. A single straight line arrangement with no center aisle display tables results in more thorough department shopping. Feature displays slotted in or between the regular display cases are more effective than center aisle displays. Extension displays which extend into the aisle from the regular display may be used for feature items. This is an extension to the regular display that extends out into the aisle. A case setup plan should be prepared, and copies should be kept available in the produce market for use in planning and setting up displays. Such a plan is especially useful when the availability of items fluctuates or when new employees are being used in the produce market. A recommended plan is shown in figure 9.

d. Display grouping. In some produce markets, items are divided into two basic groups, fruits and vegetables, while in others, the items are intermixed without grouping. In most cases, however, produce items are arranged and grouped according to use. Patron selection of produce is made easier by grouping like items, such as salad vegetables, cooking vegetables, and citrus fruits. The basic use groups of fresh fruits and vegetables are as follows:

(1) Staple vegetables. The two most common staple vegetables are potatoes and onions.

1. _____ 5. _____ 9. _____

2. _____ 6. _____ 10. _____

3. _____ 7. _____ 11. _____

4. _____ 8. _____ 12. _____

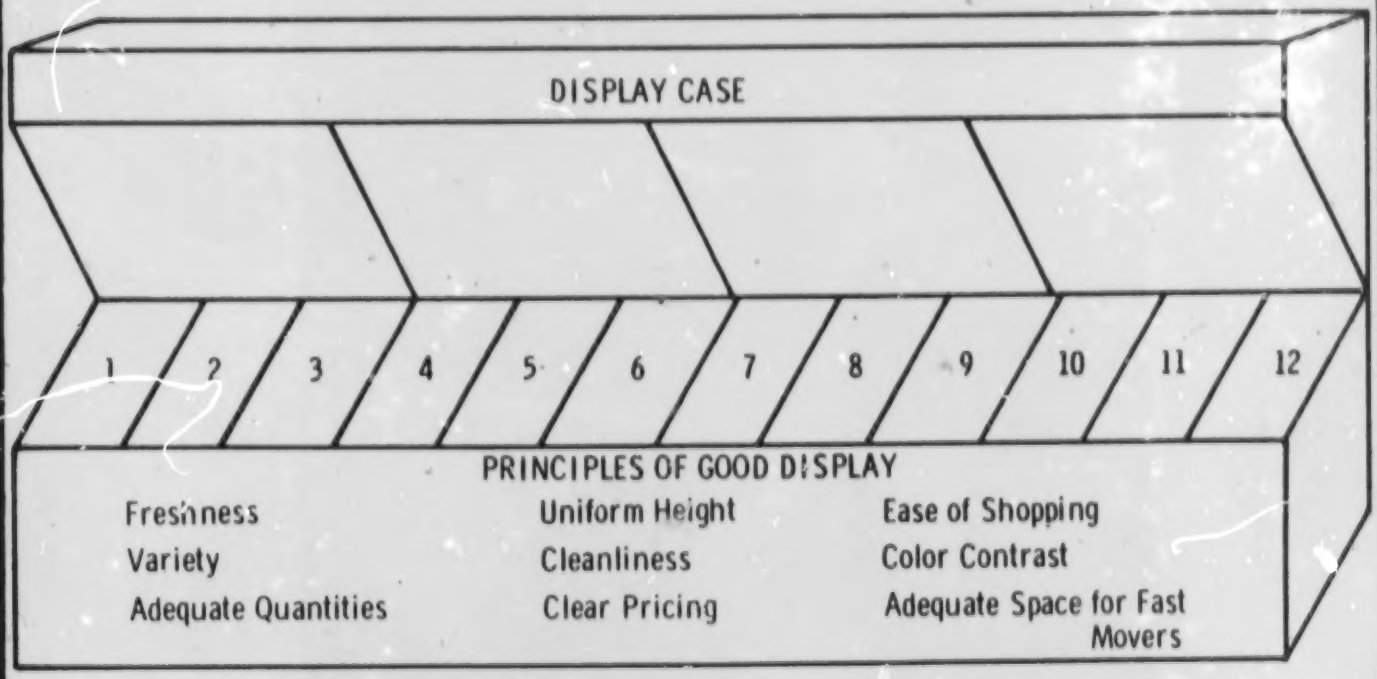

Figure 9. Produce case setup plan.

(2) Cooking vegetables. Vegetables included in this group are corn, peas, beans, cauliflower, squash, eggplant, brussel sprouts, beets, turnips, and greens such as spinach and kale.

(3) Salad vegetables. This grouping includes lettuce, cabbage, celery, peppers, radishes, cucumbers, and carrots.

(4) Staple fruits. Staple fruits include apples, oranges, and bananas.

(5) Seasonal fruits. Seasonal fruits include such items as strawberries, blueberries, cherries, and peaches.

e. Display supervision. The job is only partly done when packages go into the displays and fresh produce is arranged for sale. Constant attention should be given to displays to keep them stocked and orderly. Off-grade produce must be removed and retrimmed. Good displays must be planned ahead of time. The produce market manager must use ingenuity in building displays to make them as attractive as possible.

f. Overnight care. Fruit and vegetable storage rooms and refrigerators should be used to hold produce during the night after daytime display without refrigeration. The cooling effect of night refrigeration carries well into the following day when the produce is displayed again. Produce displayed in ice-bed cases may be prepared for overnight storage by garnishing with a thick coating of crushed ice and covering with wet burlap or other suitable material. Produce displayed in refrigerated cases usually requires no preparation for overnight storage and should be left in display cases. Sprinkling may be required to restore moisture.

g. Produce reduced for quick sale. Items that are slightly damaged or not in prime condition but are still edible and salable should be removed from the regular display. These items should be retrimmed and repackaged, if necessary, and displayed in a location separate from the regular display. It is advisable to vary the color of the tray used or the method of packaging these items to avoid reflecting on the quality image of the regular display. Prices should be reduced to insure early sale, and the items should be identified with a sign stating "Reduced for Quick Sale." Close surveillance should be maintained over items reduced in price to insure that they are discarded when they become nonsalable.

APPENDIX

REFERENCES

AR 31-7 Procurement Inspection of Subsistence Supplies

AR 31-100 Commissaries Subsistence Supplies Authorized for Sale in Commissary Stores

AR 31-200 Army Commissary Operating Procedures

TM 10-416 Produce Market Operations, Commissary Stores

USDA, Agriculture Bulletin No. 66

USDA, Marketing Bulletin No. 2, Work Area Organization

USDA, Marketing Bulletin No. 3, Ordering, Receiving, and Storing

USDA, Marketing Bulletin No. 4, Trimming, Managing, and Scheduling

USDA, Marketing Bulletin No. 11, Managing and Scheduling of a Retail Produce Market

SLAB 387C Credit Hours: 3

LESSON EXERCISES

REQUIREMENT. Exercises 1 through 25 are multiple choice. Each exercise has only one single-best answer. For each exercise, indicate your answer on the answer form.

1. One of the primary advantages of the one-hundred-percent prepackaged self-service produce market is

   a. greater sales assistance and customer service.

   b. closer supervision and rework of displays.

   c. reduced labor costs by eliminating weighing stations.

   d. more colorful and attractive displays.

2. Arrangement of display cases in the produce market should be designed to

   a. allow the shopper to progress through the department.

   b. provide easy access to the bulk storage area.

   c. facilitate the restocking of displays.

   d. segregate new and old merchandise.

3. The primary responsibility of the produce market manager is to

   a. consolidate merchandise on hand and prepare storage space for new shipment.

   b. receive, process, and merchandise produce items.

   c. insure that ample supplies of fresh fruits and vegetables are available at all times.

   d. adjust prices and perform customer services.

4. An objective in planning produce market operations is to

   a. increase available storage space.

   b. improve the quality of produce displayed.

   c. reduce the amount of processing required.

   d. determine produce market requirements.

5. An important factor in planning the production schedule for processing operations is lag time. Lag time refers to the

   a. turnover time for the items sold.

   b. time wasted by employees.

   c. time required to rework items for return to display.

   d. time required to get the product ready and on display.

6. An important factor to consider in determining the types and varieties of fresh fruits and vegetables to order is

   a. customer preference.

   b. display space available.

   c. lag time required.

   d. the weekly work schedule.

7. As a guide to seasons and availability of produce items, availability forecasts are published periodically by the

   a. U.S. Department of Agriculture.

   b. U.S. Army Food Service Center.

   c. Defense Personnel Support Center.

   d. National Produce Growers Association.

8. Discrepancies in locally purchased produce shipments should be reported to the

   a. commissary officer.

   b. installation contracting officer.

   c. installation commander.

   d. installation veterinarian.

9. When preparations are made for the receipt of produce, merchandise on hand should be

   a. sold at a reduced price.

   b. loaded on skids or dollies for movement to work areas.

   c. code dated and stored with new merchandise.

   d. consolidated on one side of the cooler.

10. All overripe produce items should be

   a. placed to the front of displays.

   b. segregated and reduced in price for quick sale.

   c. placed on top of fresh produce.

   d. segregated and discarded as unsalable.

11. Which of the following vegetables in a bulk display should be sprinkled before fluffing?

   a. Salad greens.

   b. Lettuce.

   c. Celery.

   d. Beans.

12. The temperature range for storing fresh citrus fruits is

    a. 29° to 31° F.

    b. 30° to 35° F.

    c. 40° to 50° F.

    d. 62° to 70° F.

13. Ethylene gas acts as a ripening agent for apples, bananas, and pears. This gas is a byproduct of which of the following?

    a. Apples and pears.

    b. Bananas and apples.

    c. Pears and peaches.

    d. Bananas and pears.

14. The production schedule for processing operations is based on

    a. personnel and display space available.

    b. the shelf life of the product.

    c. product movement records and lag time.

    d. number of sales per individual.

15. The purpose of the weekly work schedule is to

    a. provide a list of jobs to be performed each day during the week.

    b. show the number of items processed during the week.

    c. determine the time required to prepare the items for sale.

    d. specify working hours for employees.

16. Which of the following methods is used to lengthen life of asparagus for sale?

    a. Place in cold water.

    b. Trim to remove butt.

    c. Keep in storage at room temperature.

    d. Wipe with a soft cloth.

17. In the trimming operation, containers for trimmed produce should be positioned

    a. close to and in front of the operator.

    b. at a 45° angle.

    c. to the operator's left.

    d. to the operator's right.

18. Tying or packaging may be combined with the trimming operation to

    a. reduce personnel.

    b. avoid rehandling the product.

    c. speed up production.

    d. reduce lag time.

19. Two of the most common types of packages found in commissary store produce markets are

    a. film-wrapped packages and bags.

    b. cellophane overwrapped backboard and film-wrapped trays.

    c. sleevewrapped tray and film overwrap.

    d. trays banded with tape and cellophane bags.

20. Apples, citrus fruits, potatoes, and onions are bagged in

    a. cellophane bags.

    b. Kraft paper bags.

    c. cloth bags.

    d. polyethylene bags.

21. To insure that the proper standards of sanitation and maintenance are met, a daily inspection of the produce market should be made by the

    a. installation veterinarian and commissary officer.

    b. commissary officer or the commissary store manager.

    c. produce market manager and the commissary store manager.

    d. Commissary officer and the produce market manager.

22. The produce market receives 5 boxes of tomatoes from the issue commissary priced at $.17 per pound. Each box contains 25 pounds of tomatoes. Assuming a 10 percent waste factor, the selling price of these tomatoes in the commissary store produce market would be

    a. 17 cents per pound.

    b. 17.5 cents per pound.

    c. 18 cents per pound.

    d. 19 cents per pound.

23. The installation contracting officer purchased 12 crates of cabbage from a local produce vendor for sale in the commissary store produce market. The net weight of each crate was 50 pounds and the invoice price was $.07 per pound. If the trim loss was 10 percent and the waste factor 5 percent, what would the selling price of these cabbages be?

    a. 8 cents per pound.

    b. 9 cents per pound.

    c. 10 cents per pound.

    d. 11 cents per pound.

24. A nonrefrigerated display case which provides low temperatures and high humidity is the

    a. gravity-flow type.

    b. closed-connection type.

    c. forced-circulation type.

    d. ice-bed type.

25. Produce displayed in refrigerated cases should be

    a. removed at night and stored in iced produce barrels.

    b. garnished with a thick coating of crushed ice for overnight storage.

    c. left in display cases overnight.

    d. removed at night and stored in cold storage rooms.

REQUIREMENT. Exercises 26 through 32 are matching exercises. Column I is a list of statements which describe important principles of produce display. Column II lists five principles essential to effective produce display. Select the principle in column II that is described by each statement in column I and indicate your answer on the answer form. The choices in column II may be used once, more than once, or not at all.

Column I		Column II
26.	Display of apples or potatoes used in conjunction with packages of similar items to provide the customer a choice.	a. Bulk display. b. Mass display. c. Color contrast. d. Lighting. e. High-demand items.
27.	Mirrors can be used as an aid when displaying items such as lettuce or cabbage.	
28.	Display creates the appearance of an abundant supply of items such as oranges or melons.	
29.	Display can do much to enhance the attractiveness of produce displays which include eggplants, cabbage, white potatoes, onions, and sweet potatoes.	
30.	Display includes arrangements such as red and green apples, white and red grapes, and blueberries, strawberries or cherries.	
31.	Brings out the natural color of produce items such as bananas, tomatoes, and oranges.	
32.	Display of bananas, apples, oranges, tomatoes, potatoes, and lettuce can be effectively used to encourage complete department shopping.	

REQUIREMENT. Exercises 33 through 42 are matching exercises. Column I is a listing of produce items. Column II lists the five basic use groups of fresh fruits and vegetables. Select the use group in column II which includes each produce item in column I and indicate your answer on the answer form. The choices in column II may be used once, more than once, or not at all.

Column I	Column II
33. Cabbage.	a. Staple vegetables.
34. Oranges.	b. Cooking vegetables.
35. Squash.	c. Salad vegetables.
36. Onions.	d. Staple fruits.
37. Cauliflower.	e. Seasonal fruits.
38. Peaches.	
39. Celery.	
40. Brussel sprouts.	
41. Bananas.	
42. Blueberries.	

REQUIREMENT. Exercises 43 through 50 are true-false. Indicate your answer on the answer form by using A for TRUE and B for FALSE.

43. The type of produce market recommended for commissary stores is patron self-service, clerk pricing.

44. The produce market may be located near the exit on the perimeter of the store.

45. An important factor to consider when ordering produce items is value.

46. Produce received direct from vendors is processed through the issue commissary.

47. Produce items should be packaged at a slack time in the produce market.

48. Produce display cases must be emptied, cleaned, and washed at least twice a week.

49. The commissary officer is authorized to adjust prices of produce, as required, to avoid gain or loss resulting from overall operation of the produce market.

50. In mass displays, produce may be displayed either in bulk or package.

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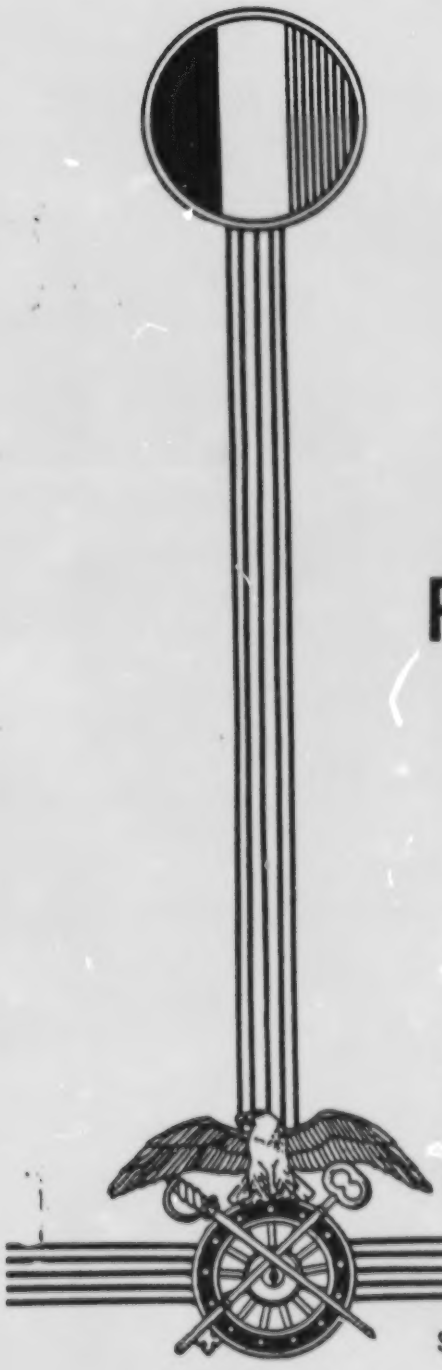
SLAB 387D

Single-Lesson Assignment Booklet:

DETERRENCE OF PILFERAGE AND SHOPLIFTING



U.S. ARMY QUARTERMASTER SCHOOL
FORT LEE, VIRGINIA

SUPPLY TRAINING CENTER OF THE ARMY SCHOOL SYSTEM

JANUARY 1972

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SLAB 387D Credit Hours: 2

LESSON ASSIGNMENT

SUBJECT	Deterrence of Pilferage and Shoplifting.
STUDY ASSIGNMENT	Lesson Text.
SCOPE	Deterrence of pilferage and shoplifting, including employee training and identification of shoplifters; shoplifting techniques; control measures and procedures for apprehending shoplifters; employee and vendor pilferage, including effective methods of control.
OBJECTIVES	As a result of successful completion of this assignment, the student will be able to--

1. Explain why employee training is important in preventing shoplifting and pilferage.
2. Describe the methods and techniques used to identify shoplifters.
3. List the traits and behaviors generally associated with shoplifters.
4. Describe the most common techniques used by shoplifters.
5. Point out important factors that facilitate shoplifting.
6. Outline control measures designed to prevent shoplifting.
7. Explain the proper procedures to observe in apprehending shoplifters.
8. Identify the most common methods of employee pilferage and cash thefts.
9. List effective methods of controlling employee and vendor pilferage.

LESSON TEXT

SECTION I

INTRODUCTION

1. GENERAL. Shoplifting and pilferage have always been the nemesis of the retail store manager, but with the advent and expansion of the self-service concept in retail merchandising it has become a problem of major concern. It is equally prevalent in department stores, variety stores, discount stores, apparel shops, drug stores, hardware stores, and supermarkets. It is estimated that over 2 billion dollars in merchandise is shoplifted annually. In supermarkets alone, losses attributed to shoplifting increased from 260 million dollars in 1960 to more than 600 million dollars in 1966 and have probably doubled again since then. Unfortunately, shoplifting is a simple crime to commit, and many shoplifters, who are also good and valuable customers, do not even consider it a crime. When the plaguing problems of deliberate despoiling of perishable products in the store and free sampling of snack foods and candies by children under the watchful eyes of their mothers are taken into account, supermarket shrinkage becomes a problem of epic proportions. Studies have shown that very few people steal merchandise for which they cannot pay. Of 698 shoplifters apprehended in 150 chain stores in Chicago, one was a kleptomaniac in need of help, two were hardship cases, and the balance just could not pass up the opportunity to take something for nothing. While sophisticated techniques, such as electronic "microdot" labels and close circuit television, are being developed to deter would be shoplifters and assist managers in catching culprits red-handed, alert store personnel are still the best deterrents. A continuous training program of prosecution, publicity, and consumer education are the store's major weapons.

2. TYPES OF SHOPLIFTERS. It is not possible to identify a typical shoplifter any more than it is possible to spot the average customer. Professional shoplifters and kleptomaniacs account for only a tiny fraction of shoplifting losses. Women account for 85 percent of the Nation's shoplifting as opposed to 15 percent for men. However, the total dollar value of merchandise shoplifted by men is greater than that shoplifted by housewives. The types of shoplifters according to the percentage of shoplifting for which they are responsible may be listed as follows:

a. Amateurs. Contrary to popular belief, amateur shoplifters are not always from lower economic groups, but in fact come from all economic strata and often have charge accounts or large bank accounts. Analyses of 197 apprehensions show that 56 involved professors, doctors, teachers, engineers, salesmen, office workers, military officers, and wives of such men. Loot taken by amateurs is largely from counters displaying such items as lingerie, hose, costume jewelry, and various small articles. Amateurs account for about 59 percent of all shoplifters, and they steal for many reasons such as real or imaginary hardship, personal needs, because the opportunity presented itself, or for the thrill involved.

b. Teenagers. Teenage youths are impulsive shoplifters, stealing either because of the desire for an item they cannot afford, or just for the excitement of stealing. They take things that they do not need and usually do not attempt to profit by their act. Shoplifting is an adventure for the teenager and when caught, they are usually ashamed and sorry, and in most cases they may never do it again. Teenagers account for about 20 percent of all shoplifters.

c. Professionals. The professional relies completely on shoplifting for his support. His specialty is clothing, furs, and jewelry. Being an expert, he frequently trains accomplices and often works with them in groups of two or three. When the shoplifters work in pairs, one person occupies the attention of the salesperson while the other does the lifting. The same principles are used by groups or gangs; two or more persons may act as shields while the others do the lifting. If observed, the professionals may crowd around the display and put the item back. Professional shoplifters make up about 15 percent of all shoplifters.

d. Narcotic addicts. The narcotic addict shoplifts for merchandise with high resale value because of his expensive habit. In an emergency, he will steal anything to satisfy his habit. The narcotic addict travels fast and steals from such places as drug stores, open delivery trucks, stockrooms, freight platforms, or freight elevators. The items stolen are sold to a "fence" for whatever he can get, often less than half the value of the item. Addicts make up about 5 percent of all shoplifters.

e. Kleptomaniacs. The kleptomaniac accounts for not more than 1 percent of all shoplifters. He is a compulsive

thief who may steal anything regardless of value. The kleptomaniac is a person who, because of a psychological malfunction of values, cannot resist stealing.

3. SHOPLIFTING TECHNIQUES. The techniques employed by shoplifters to steal merchandise are as varied as the shoplifters themselves. Many of these are familiar to store managers and employees, and measures can be taken to deter their use. However, new and ingenious methods are constantly being detected and store personnel must be ever alert to possible shoplifting techniques. Some of the techniques which have been used successfully by shoplifters are as follows:

a. Bold walk-out. Some shoplifters simply pick up merchandise and walk out with it. Many times items such as scarves, gloves, coats, or similar items may be taken from the counter and worn out of the store as one's own property. In one instance, two men walked out of a store with a canoe over their heads. They were arrested when they returned for the paddles. In another case, a man carried a large overstuffed chair to an elevator and out the front door. Sometimes shoplifters are inadvertently assisted by store personnel. A department store lost a refrigerator and a television set from a floor display, and the floor manager helped the man remove then from the store and load them on his truck. Alert store personnel can frequently deter this type of shoplifting by questioning strangers. One saleslady saved the store many dollars by questioning the well-dressed man that entered the stockroom with a blueprint under his arm. She asked him two questions: "Do you work for the store?" and "May I see your identification?"

b. Shopping bag. One of the most common techniques of the amateur and professional alike is the shopping bag. This device is a large shopping bag usually lined with plywood and fitted with a lid on which are glued several packages to give the appearance of being full. Items such as roasts, canned hams, and steaks can be stuffed into the lined bag without undue distortion and covered with the false lid.

c. Specially altered clothing. Frequently, shoplifters wear specially designed clothing such as baggy bloomers, oversized trousers, booster skirts and aprons, muffs, and specially lined coats with oversized pockets and convenient slits. With these items, clever thieves and pick up and carry out such items as small appliances and all kinds

of food articles or tobacco products. Many items can be pilfered and secreted within the altered clothing without the person taking his hands out of his pockets.

d. Booster boxes. A popular device used by many shoplifters is the booster box. It resembles a package neatly wrapped and tied with string. Some even have labels and are addressed for mailing. One end of the package has a springloaded opening into which stolen merchandise may be placed. Variations of this device include elaborate metal boxes with strong springs which are hard to detect or items which appear to be a large roll of cotton wrapped in paper with a hollow interior and one end that can be opened. Many legitimately purchased items are often used as booster boxes. For example, a short length of linoleum may be wrapped to form a cylinder. Items are stuffed inside and the wrapped ends are rearranged to appear normal. Boxes of various sizes may be used, but suit or coat boxes seem to be preferred. Folded newspapers or magazines may be used to conceal items such as phonograph records, jewelry, gloves, stockings, small hardware items, drug items, and many other small articles.

e. Restroom tactics. A prevalent practice among shoplifters is to take several garments into a fitting room or restroom and secret one or more of these items under regular clothing. Both outer or under garments may be stolen in this manner. Food articles may be taken into restrooms and stuffed into hats which are openly worn out. Food carts may be wheeled to restrooms and items carried into the restroom and concealed under a wide belt or other clothing.

f. Crotch carriers. The crotch carrier is usually a professional, and many go to school to learn this technique. It takes great skill and practice and the serious student may practice long hours daily with phonograph records or telephone directory to strengthen the thigh muscles. An experienced crotch carrier can carry practically anything between the thighs including canned coffee, canned hams, roasts, tobaccos, and even a typewriter in a case. One carrier, when apprehended, was carrying six cartons of cigarettes between the thighs. The crotch carrier can usually be detected by the mode of walking. They usually walk slowly with a shuffle and in a pigeontoed fashion.

g. Other types of carriers. Other types of carriers include women who enter the store flat chested and emerge exceedingly well formed, mothers with false bottoms in baby carriage or under the child, and carriers who conceal items inside waistband of trousers, under armpits, or between two bags. Some carriers also switch price tags on items and check them out at a lesser price.

SECTION II

DETERRENCE OF SHOPLIFTING

4. CAUSES OF SHOPLIFTING. Shoplifting is generally made possible by inexperienced or indifferent salespeople who, through lack of training or lack of interest in their customers, fail to observe the conduct of persons around them. The first thing a potential shoplifter observes when he enters a store is how efficiently the store is being operated. He notices whether the shelves are kept full of stock, whether employees are servicing the customers, and whether security controls are being observed. Alertness and keen powers of observation are essential qualities of sales personnel, not only to prevent shoplifting, but to serve customers adequately. Other factors which contribute to the facility of shoplifting are as follows:

a. Unattended departments or sections. Departments or sections which are unattended by salesclerks encourage shoplifters and facilitate their operations because of the lack of observation.

b. Excessive merchandise on showcases or counter tops. Excessive merchandise stacked on showcases or counter tops obstructs vision and makes surveillance difficult. The exact number of items on display is difficult to determine. Salesclerks can more easily account for a smaller number of items on display.

c. Empty boxes still on display. Boxed merchandise that has been sold or pilfered with the box still on display illustrates to the customer that there is poor housekeeping and lack of observation on the part of the salesclerk.

d. Empty hangers on garment racks. Empty hangers may indicate that merchandise has been pilfered. Many shoplifters will put two garments on a single hanger to carry into the dressing room. Too often, sales personnel will count the hangers and not the pieces of clothing.

e. Handwritten price tickets. Handwritten price tage prepared by salesclerks with pen and ink or pencil illustrate poor control and make price manipulation by the shoplifter easier.

f. Illegible marking. Illegible price markings caused by poor maintenance of marking equipment suggest to the potential shoplifter that store personnel won't know the correct price of the item.

g. Exit security. Permitting passage to and from the stockrooms and warehouse areas is an invitation to shoplifters. This is a security violation that should never be permitted.

h. Unfilled counters. Unfilled counters and display cases provide the thief with two conclusions--store personnel are unconcerned because of the poor job of housekeeping and sales personnel will never be certain that anything is missing.

5. RECOGNIZING SHOPLIFTERS. In general, the honest person acts in an honest manner, shows no sign of nervousness, handles merchandise openly, concentrates on the article and not his surroundings, and shows no sign of uneasiness when approached by a salesclerk. The assumption of the outward appearance of a genuine customer can be achieved by a professional thief, but they never lose that definite behavior pattern. Their use of various methods of carrying off merchandise generally follows the same pattern. Store employees can help prevent shoplifting by keeping an alert eye for traits and behaviors generally associated with the shoplifter. Many times the potential shoplifter will give away his intentions to an alert salesperson. A furtive, shifty eyed customer should certainly warrant close observation from sales personnel. The hands of a suspicious customer should be watched. The dexterity of accomplished shoplifters is amazing. In general, store personnel should be instructed to watch for

a. the lingering customer who refuses to be rendered service.

b. loitering children wandering aimlessly around the store who might be tempted by something they see and will take it if they are not closely observed.

c. the customer who wanders aimlessly, buying nothing.

d. the customer who loiters, handling numerous items but buying nothing.

e. the nervous customer who does not want anyone to wait on him.

f. customers with open packages, open purses, and empty bags.

g. customers traveling in groups who keep the sales-clerk busy talking.

h. customers who linger around partially hidden displays.

i. customers who attempt to get behind a counter.

j. the person wearing heavy, bulky clothing in mild weather.

k. strangers going into stockrooms.

l. teenagers when they are grouped around displays.

m. the customer who keeps sending the clerk for other sizes, colors, styles.

n. the person who seems to handle tickets excessively; he may be removing or switching tickets.

o. customers carrying unwrapped items away from a department or area which is not self-service and for which payment may not have been made.

p. any customer who takes merchandise into a rest-room or an excessive amount of merchandise into a fitting room.

6. SHOPLIFTING CONTROL. As a part of the regular training program, every employee should be made aware of the seriousness of shoplifting and the problems of shoplifting control. Some effective methods used to reduce shoplifting are as follows:

a. Employee responsibilities. Each employee should be alert, attentive, and courteous to customers without leaving any impression of suspicion. A customer will not pilfer while under observation. It is bad policy to give customers the feeling that they are under observation. If an employee sees a customer shopping with an open purse, carrying products in hand while pushing a cart, or otherwise

looking suspicious, it is best for the employee to notify the manager without arousing attention. The manager can then watch the person from a vantage point to determine whether or not the customer is waiting for an opportunity to conceal merchandise. Employees should scan the aisles constantly during work. They should look up often, regardless of the task being performed, and acknowledge the customer's presence with a hello, a nod, or a smile. This puts shoplifters on their guard and discourages them. Employees should make an effort to remember faces and point out known shoplifters to other employees. It pays off when shoplifters return. Employees should take the shoplifting problem seriously and make the prevention of shoplifting a day-to-day habit.

b. Store lighting. The entire store should be adequately lighted with no dark corners or obscure areas. In stores where crowded conditions and facilities create blind areas, the use of "detecto" mirrors is recommended.

c. Work schedule. The most critical hours for shoplifting during the workday are usually during the noon hour and during the opening and closing hours. Work schedules should be arranged so that the highest number of clerks are on the floor during these critical hours.

d. Traffic control. Customer access to the store should be through the front entrance only, and exit should be through the checkout counters. Unattended checkout lanes should be blocked off so that every customer with merchandise must pass a checker. If a customer has not selected any merchandise and does not leave through a checkout lane, he should leave by an exit that is under observation. The storage area should be accessible to employees only, and rear doors should be kept locked except when deliveries are made.

e. Displays. Displays that conceal the potential shoplifter should be avoided. Obstructing vision in any part of the store invites pilferage. High displays or large signs, for example, create blind spots where dishonest customers can easily transfer items from carts into pockets and handbags. Aisles should be kept open and in full view to eliminate privacy for the pilferer. Displays of items such as candies and tobacco products and small valuable items such as film and razor blades that offer temptation to pilferers should be located near the checkout counters or other places where they can be watched easily. Glove and stocking displays should be located close to the cash registers. Phonograph records should be displayed where they can be easily observed and should be separated from the magazine displays. Magazines are often used to conceal and carry out records.

f. Checkout. Customer's purchases should be placed in bags and sealed by stapling cash register receipt to bag. If purchase is made of large items which cannot be placed in bags, the customer should be handed the sales receipt and a special colored or marked tape should be tied or attached to items to indicate customer payment. A "speed" or "express" checkout lane should be established and used as much as possible. This arrangement provides a service for the regular customers and gives the pilferer less opportunity to hide merchandise. Checkers should ask to examine the price of any item the customer seeks to hold himself while offering exact change at the checkout. Sometimes, items hidden within will reveal their presence by the added weight.

g. Floor-walking. The manager or other responsible persons should patrol unattended departments in a conspicuous but helpful manner. Recognizing customers, offering assistance, and introducing new items build good customer relations and help discourage theft. Children should be queried: "Is mother with you?" Small children are accomplished lifters of candy, gum, or small toys. Acknowledging their presence reduces the temptation to steal and also cuts down on price-ticket moving and other forms of mischief. Honest customers want to be helped; dishonest customers do not want help or attention.

h. Warning signs. The posting of signs to alert customers of the seriousness of shoplifting is often effective. Signs such as "Shoplifters will be prosecuted" or "Shoplifting is a criminal offense, punishable by law," can be an effective deterrent to potential shoplifters.

i. Detecting devices. Small strategically placed cameras not only provide proof of shoplifting but they also make the shoplifter less inclined to steal. Another method of detecting shoplifters is to have one or more strategically located spots where an employee can watch parts of the store without being seen. An example is a peephole in the rear of the store. "Magic mirrors" or glass windows that a spotter can look through without being seen, are also effective.

7. APPREHENDING SHOPLIFTERS. Confronting a shoplifter requires good judgment; mistakes can result in serious consequences. The problem of examining a customer's shopping bag can be an extremely delicate situation. If no one actually saw a customer take merchandise, it is dangerous to insist on seeing what is in the shopping bag, even if there is a strong suspicion. It is much safer to try to remember

the suspect and observe him carefully on subsequent visits. Some suggestions for confronting or apprehending shoplifters are as follows:

a. When a shoplifter is detected, the manager or his assistant should be called immediately. Under no circumstances should a salesperson question or detain a customer suspected of shoplifting. If a situation arises wherein a salesclerk has observed a theft and conditions are such that it is impossible or impractical to summon the manager or assistant manager, the salesperson should say to the individual "I'll be happy to wrap that merchandise for you." If this does not result in the return or sale of the merchandise, the matter should be pursued no further without the aid of the manager or his assistant.

b. The salesperson observing a theft should keep the person in full view at all times and have another employee summon the store manager. The reason for this is that the person may dispose of the merchandise before leaving the store. This may be done because the person knows he has been detected, or he may be hopeful of getting grounds to sue the store for false arrest or slander.

c. As soon as possible after a theft has been seen, a salesperson in the department affected should ring up a "NO SALE" on the cash register and write an explanation on the receipt and reserve it. This will serve to place the theft in chronological order with respect to legitimate transactions.

d. All suspiciously acting customers or known shoplifters should be reported to the manager. Although some of the persons reported may well be legitimate customers, only through alertness, observation, and immediate notification can shoplifting be kept to a minimum.

e. When a customer is detected in the act of pilfering, he should be allowed to pocket or hide the item. Then, storeclerks should be assigned to follow the person through the store in a conspicious manner. When the customer realizes he is being watched, he will usually put the merchandise back on the shelf or pay for it and leave the store.

f. A customer should never be confronted unless it is an absolute certainty that he has pilfered merchandise and intends to take it away without paying for it.

g. When a suspected shoplifter is confronted and interviewed, another employee should be present as a witness.

h. Stolen merchandise should always be recovered as quickly as possible.

i. Children should be handled carefully but firmly. Even though children are more obvious in their attempts to pilfer and are usually easier to confront than adults, it is usually best to discuss the matter with parents first.

j. Two cardinal rules that should be observed when shoplifters are apprehended are: be tactful and be sympathetic. A third rule, or precautionary measure, is to never make an accusation; instead, get the pilferer to admit his guilt. This point is essential; it could save a lawsuit.

SECTION III

EMPLOYEE PILFERAGE AND THEFT

8. GENERAL. Although everyone would like to believe that all employees are honest, experience shows that this is not true. If all employees were honest, it would be unnecessary for businesses to bond employees and implement costly safeguard controls against losses from employee thefts. Reports published by bonding companies and management systems firms indicate that the number of employee thefts have increased considerably in recent years and that their dollar amount losses exceed the combined total of losses from all other types of crimes. Many cases of employee dishonesty have been detected by retail stores ranging from minor pilferage of small items to major thefts of cash and merchandise totaling thousands of dollars. In many stores, losses through employee pilferage may be greater than losses to shoplifters.

9. METHODS OF PILFERING. The following are some of the most common methods used by store employees to steal cash and merchandise. Numerous other methods are also used, and retail store management should be continuously alert in safeguarding against all types of employee dishonesty.

a. Merchandise pilferage. Listed below are some typical examples of methods devised by employees to pilfer merchandise.

(1) Concealing and carrying out small items of merchandise in clothing or handbags. This is a general method used by many employees who pilfer merchandise from the store.

(2) Hiding merchandise in a locker until there is a convenient time to eat it or take it out of the store.

(3) Eating candy or other snack items while working is another way to pilfer. This often follows intentional breakage of packages or deliberate damage to merchandise.

(4) Supplementing lunch with soft drinks, cakes, or other food items. Eating in the store may begin in a small way and eventually lead to cookies and milk, and then sandwiches and even full meals.

(5) Learning where the back door key is kept and, when no one is watching, unlocking the door, taking merchandise outside and hiding it in garbage cans or other convenient places, and picking it up later.

(6) Having keys made to fit locks on the entrance and storage room doors and returning, or having an accomplice return, when the store is closed to pilfer goods.

(7) Taking merchandise transferred to expense. Some employees remove and appropriate for their own personal use, items which have been transferred from retail stocks to expense supplies, such as mechanical pencils and pens.

(8) Attempting to cover up theft of merchandise through padding of inventories by deliberately overstating quantities of items on hand and unit prices on inventory sheets. Cases of inventory padding have been detected involving individual losses of thousands of dollars.

b. Cash theft. Mishandling of cash at the checkout counter either for personal gain or for exchange of favors from relatives or fellow employees is one of the most common sources of loss of cash and merchandise. Some of the techniques employed in the theft of cash from retail stores are as follows:

(1) Dishonesty at the cash register is a major source of revenue loss in retail stores. Frequently, employees authorized to make purchases in the store will check each other out for personal gain, or checkers will permit friends or relatives to buy merchandise for which they are not fully charged.

(2) A checker may conveniently forget to ring a sale or ring less than the amount actually purchased. The checker then leaves the unrecorded money in the register until it is convenient to slip it into a pocket or purse.

(3) In one instance, a store manager bought and installed his own cash register. He was able to pocket $70,000 in receipts before the owner discovered an extra checkout counter.

(4) Dishonest clerks may increase prices on sales tickets and sell merchandise to customers at the increased prices. In such instances, the salesclerk keeps a record of the overages and later removes the money. In other cases, merchandise correctly priced at $10.00 is retagged by employees and purchased by them for $5.00.

(5) False accountability credits may be obtained if the employee enters incorrect quantities on the voucher as to the number of items changed in price. For example, the employee marks down 100 units actually on hand but takes credit on a price change voucher for having marked down 200 such units. Markups may also be falsified by documenting only 100 units on a price change voucher whereas 200 units are actually on hand. These false accountability credits create an overage in cash or merchandise which is later removed by the employee.

(6) Over or under reporting of merchandise receipts. Employees, in collusion with suppliers or carriers, may prepare accountable documents or acknowledge receipt of merchandise which was not actually received. For example, direct delivery tickets for merchandise charged to, but not received by the store might be signed by a dishonest employee for a gratuity.

(7) Conversion of merchandise into cash by dishonest employees. This might be accomplished by collusion of individuals working in the stockroom or warehouse and the sales store. In this case, merchandise issued is not charged to the sales store, and the money derived from the sale of such items is taken and divided among the dishonest employees.

10. REDUCING EMPLOYEE PILFERAGE. The store manager who screens potential employees carefully before hiring, has an effective training program, sets a good example for his employees, and enforces store policies strictly is not likely to have serious employee pilferage problems. Some effective methods for reducing employee pilferage are as follows:

a. Screening employees. The background and previous employment record of all unknown applicants should be checked carefully to learn whether they have been honest in the past. This policy does not insure that only honest applicants are hired, but it is a means of eliminating some undesirable employees.

b. Effective training program. Training programs, even if they are aimed primarily toward preventing customer and vendor pilferage, usually tend to reduce employee pilferage. Employees know that management is alert; therefore, they are more aware of the seriousness of pilferage loss and more apprehensive of the consequences if they are caught. They should be trained that reporting pilferers is a part of

their responsibility. Training programs should include examples of common errors encountered in daily operations and ways of handling them to avoid embarrassment and a feeling of guilt. A training meeting on employee pilferage must be carefully planned. Integrity must be emphasized strongly without destroying good personal relations or creating the feeling that everyone is a suspect.

c. Setting a good example. The manager should realize that his actions and those of his assistants are closely watched by the employees, who look to them for guidance and leadership. If the manager is lax in handling adjustments, shortages, overages, and similar issues, his actions can be indirectly responsible for dishonest acts and later punishment of other employees.

d. Enforcing store policy. Store policies designed to discourage employee pilferage should be established and enforced rigorously at all levels. Some effective rules which should be enforced at all times are listed below.

(1) All employees, including the store manager, should enter and leave the store by the front entrance.

(2) Personal effects of employees should be kept in locked individual cabinets or, if not available, in the manager's office. Such items should never be permitted to be kept at cash registers or under counters.

(3) Authorized employees should buy merchandise only during working hours. They should present their register slips and merchandise to the manager; he should initial the slip, initial and seal the merchandise, and set it aside in a safe place until it is called for.

(4) Employees should never be allowed to eat lunch in the sales area.

(5) Locks on doors should be changed periodically, and security checks should be made at closing time to insure that entrances are securely locked. Care should be exercised in control of keys to service entrances to make certain that only designated persons have keys in their possession. The front entrance should be secured with a substantial lock or bolting device, or both.

(6) The manager or his designated representative should frequently check the accuracy of retail prices shown on displays and tickets affixed to merchandise and investigate all variations for appropriate action. Merchandise purchased by employees should be carefully rechecked for correct price at the time of sale.

(7) Managers should insure that all price changes are made before the opening of business on price change day by responsible sales or stockroom personnel and that the prices are accurately recorded on the price change voucher. The manager or his designated representative should periodically recheck price tickets and price change vouchers to verify accuracy of item code descriptions, quantities, and prices.

(8) Periodically, the manager or his designated representative should test check the receipt of merchandise. Employees from other departments should occasionally be reassigned to count and recheck merchandise received against accompanying issue or shipping documents.

(9) Expense supplies should be issued and controlled by one employee designated by the manager.

(10) Losses can be partially controlled by requiring that empty cases and cartons be broken and flattened and by frequent inspection of trash and trash disposal areas by supervisory personnel.

(11) Inventory padding can be controlled by strict compliance with prescribed inventory regulations that require independent recheck of items and complete control over original inventory sheets by disinterested inventory inspectors. Additionally, management personnel should insure that spot-check inventories are carefully controlled, accurately taken, and rechecked.

e. Controlling cash shortages. Cash problems may be difficult to handle. Shortages and overages at the register may be due to an unintentional error or to dishonesty. The element of machine or human error should be fully considered before accusing a checker of pilferage when a shortage occurs. Cash shortage control starts with a good checker training program, followed with continuing on-the-job training. Checkers should be made aware of changes in procedures and methods of register operation; they should also be required to run orders

through the registers for accuracy from time to time. Managers should meet with checkers periodically for a friendly and instructive discussion on the importance of accuracy.

11. VENDOR PILFERAGE. Loss through vendor pilferage occurs by not receiving the amount of merchandise expected and by pilferage of stocked merchandise by vendor representatives. Vendors themselves may be completely honest, but it is difficult for them to keep all of their representatives honest. Vendor pilferage, as is true of customer and employee pilferage, is greatest when the opportunity is greatest. Also, as is true of employee pilferage, it is sometimes practiced by those who are least suspected.

a. Pilferage techniques. The dishonest vendor representative steals by preying on carelessness and indifference and the trust of his position. He can accomplish this in many different ways. Several methods used by dishonest vendor representatives to pilfer both cash and merchandise are as follows:

(1) Secret inflations. Route salesmen become familiar with store employees and are usually able to spot carelessness and indifference. They are sometimes able to get a busy assistant manager to sign their invoice without checking it carefully. Later they can inflate the invoice by adding numeral 1 before each quantity on the invoice. Thus, 24 becomes 124, 9 becomes 19.

(2) Fraudulent invoices. Sometimes vendor representatives can get a blank invoice signed by placing carbon paper between a delivered invoice and the blank one. He can then enter fraudulent quantities on the invoice and charge the store for merchandise not received.

(3) Pilfered merchandise. Route salesmen may pilfer merchandise from stock and conceal it in their empty containers which are returned to their truck. Salesmen can hide pilfered merchandise in their sample cases or briefcases.

b. Methods of control. Fortunately, store managers can prevent most vendor representative thefts simply by tightening controls over the movement of merchandise in and out of the store. The outside salesman should be subject to the same policies and restrictions as the regular store employee. Precautions which can be taken to substantially reduce the odds against theft by vendor representatives are as follows:

(1) The salesman's sample case or briefcase should be sealed as soon as he enters the store. It should be checked when he leaves to see that it has not been tampered with.

(2) Vendor representatives should be requested to leave sample cases or briefcases in the manager's office during the time he is in the store.

(3) Salesmen and vendor representatives should be asked to sign their names and arrival and departure times. This will discourage stealing because the man fears that any theft discovered after he leaves the store will be traced to him.

(4) No direct receiving should be allowed on the selling floor. All incoming and outgoing goods should be checked in and out of the store receiving room.

(5) When direct floor receiving of goods is necessary, the following control principles should be applied:

(a) Assign a supervisor, receiving room man, or executive trainee to check the merchandise into stock. The shipping room clerk is best suited for this assignment, since he is used to checking in merchandise and is familiar with proper receiving room controls. In any case, the job involves too much responsibility to assign it to a minor employee.

(b) Instruct the person doing the checking that the most important aspect of his job is to analyze the receiving invoice to insure that the store gets the merchandise for which it is charged.

(c) Also, if merchandise is received via the front door, rather than the receiving door, the merchandise should be checked at least 20 feet away from the selling display. This precaution insures that the merchandise can be recounted without danger of its being intermingled with stock on hand.

(d) Assign a precise and methodical person from the receiving department to handle all returns to the supplier. Products should be packed uniformly, with the same number in each carton and the number marked with black crayon on the outside of the carton. This method allows the cartons to be spot-checked at any time, comparing the contents to the number written on the outside.

(6) If possible, avoid accepting deliveries during the noon hour when many employees are out for lunch.

(7) Instruct all delivery men of their privileges while in the store.

(8) Check frequently to make sure there is no collusion between delivery men and receiving employees.

(9) Train all employees to watch for vendor pilferage. All errors, including those which favor the store, should be acknowledged and reported.

(10) Have merchandise checked only at the designated receiving point.

(11) Allow only receiving personnel to take signed bills to the office.

(12) Check on receiving employees frequently to make sure that a delivery is not just signed for but that items received are checked according to prescribed procedure.

(13) Make sure that rear entrances are kept locked and that the key to open them is in the hands of authorized employees only.

(14) Have employees accompany all salesmen who enter the store.

APPENDIX

REFERENCES

AR 31-200 Army Commissary Operating Procedures

Law Enforcement Bulletin

Exchange Service Pamphlet 55-1 (May 69)

Exchange Service Pamphlet 20-5 (Nov 63)

AAFES Management #10 (Mar-Jun 65)

SLAB 387D Credit Hours: 2

LESSON EXERCISES

REQUIREMENT. Exercises 1 through 19 are multiple choice. Each exercise has only one single-best answer. For each exercise, indicate your answer on the answer form.

1. The best deterrent against shoplifting today is

   a. closed circuit television.

   b. alert store personnel.

   c. detecto mirrors.

   d. microdot labels.

2. Housewives account for approximately what percentage of the Nation's shoplifters?

   a. 85 percent.

   b. 59 percent.

   c. 20 percent.

   d. 15 percent.

3. The shoplifter who specializes in clothing, furs, and jewelry can usually be identified as

   a. an amateur.

   b. a narcotic addict.

   c. a kleptomaniac.

   d. a professional.

4. A popular device used by many shoplifters is the booster box. A variation of this device is

   a. a large shopping bag fitted with a lid on which is glued several packages.

   b. specially designed clothing such as baggy bloomers.

   c. a short length of linoleum wrapped to form a cylinder.

   d. a baby carriage with a false bottom.

5. Contributing factors which make the job of the shoplifter easier include

   a. poor housekeeping and lack of observation.

   b. well-stocked shelves and display cases.

   c. well-lighted areas where he can see the merchandise better.

   d. helpful and courteous salespeople who acknowledge the customer's presence.

6. Many times, the potential shoplifter will give away his intentions to an alert salesperson. Sales personnel should always watch the

   a. person who handles merchandise openly.

   b. customer who concentrates on the article and not his surroundings.

   c. customer who wanders aimlessly buying nothing.

   d. customer who is not uneasy when approached by sales-clerk.

7. Shoplifters can be recognized by certain characteristics of behavior. Which of the following persons might warrant suspicion as a shoplifter?

   a. A person who handles merchandise openly.

   b. A customer who seems to handle tickets excessively.

   c. A customer who concentrates on the merchandise.

   d. A person who shows no signs of nervousness.

8. In order to discourage shoplifting, employees should always

   a. complete the task being performed before greeting customer.

   b. acknowledge the customers presence with a hello or a smile.

   c. watch the customer from a vantage point to see if he conceals merchandise.

   d. let the customer know that he is under observation.

9. Displays of items such as candies, tobacco products, and small valuable items that offer temptation to pilferers should be located

   a. in locked display cases.

   b. next to large displays.

   c. near the store entrance.

   d. near the checkout counters.

10. When a salesclerk has observed a theft, he should

    a. demand that the customer pay for the merchandise.

    b. detain the customer and call the police.

    c. call the store manager or his assistant.

    d. ask the customer to return the merchandise.

11. When there is strong suspicion of shoplifting, the store manager should

    a. remember the suspect and observe him carefully on subsequent visits.

    b. insist on examining the customer's shopping bag.

    c. call the police and have the suspect arrested.

    d. require the suspect to leave the store and not return.

12. When a customer detected in the act of shoplifting is confronted and interviewed, one should always

    a. be accompanied by a policeman.

    b. have another employee present as a witness.

    c. tell the customer to return the merchandise and leave the store.

    d. confront the customer alone and in privacy.

13. Which of the following measures should be observed by store personnel when a shoplifter is apprehended?

    a. Be unsympathetic.

    b. Be forceful.

    c. Make a direct accusation.

    d. Never make an accusation.

14. One of the most common sources of loss of cash and merchandise in retail stores is

    a. eating candy or other snack items while working.

    b. supplementing lunch with soft drinks, cakes, or other food items.

    c. mishandling of cash at the checkout counter.

    d. concealing and carrying out small items of merchandise in clothing or handbags.

15. Three of the following are effective methods recommended for reducing employee pilferage. One is not. Select the choice that is NOT recommended.

    a. Establish an effective training program.

    b. Insure that all price changes are made before business opens.

    c. Give examples of employees caught pilfering.

    d. Require all employees to enter and leave by front entrance.

16. Authorized employees should buy merchandise only

    a. before working hours.

    b. during working hours.

    c. after working hours.

    d. during lunch period.

17. What should be the initial attitude of the manager when shortages occur at the cash register?

    a. Checker should be required to make up the shortage.

    b. Error is usually due to the dishonesty of the checker.

    c. Checker should be suspected of pilferage.

    d. Element of machine or human error should be considered.

18. A route salesmen may sometimes inflate an invoice by using certain dishonest techniques. Which one of the following techniques would a salesman NOT be inclined to use?

    a. Adding numeral 1 before each quantity on the invoice.

    b. Forging the signature of the store manager.

    c. Changing the date on the invoice.

    d. Changing the items listed on the invoice.

19. Salesmen and vendor representatives should be asked to

    a. make all deliveries during the noon hour.

    b. deliver all merchandise directly to the selling floor.

    c. sign their names and times in and out of the store.

    d. check merchandise in and make sure that delivery is signed for.

REQUIREMENT. Exercises 20 through 23 are matching exercises. Column I is a list of statements describing the characteristics of shoplifters. Column II lists the basic types of shoplifters. Select the type of shoplifter in column II which is best described by each statement in column I and indicate your answer on the answer form. Choices in column II may be used once, more than once, or not at all.

Column I	Column II
20. Concentrates on lingerie, hose, costume jewelry, and various small articles.	a. Amateur.
21. Takes things impulsively just for the excitement of stealing.	b. Kleptomaniac.
22. Specializes in clothing, furs, and jewelry.	c. Narcotic addict.
23. Steals any type of merchandise with high resale value.	d. Professional.
	e. Teenager.

REQUIREMENT. Exercises 24 through 29 are matching exercises. Column I is a list of statements which indicate some of the common techniques used by shoplifters. Column II lists five of the most frequently used shoplifting techniques. Select the technique in column II which is indicated by each statement in column I and indicate your answer on the answer form. Choices in column II may be used once, more than once, or not at all.

Column I		Column II
24.	Items are taken from displays and worn or carried out of the store openly.	a. Bold walk-out.
		b. Booster box.
		c. Crotch carrier.
25.	With this technique many items can be pilfered and secreted without taking hands out of pockets.	d. Restroom tactics.
		e. Specially altered clothing.
26.	Shoplifter carries a package neatly wrapped and tied with string.	
27.	Many legitimately purchased items are often used with this technique.	
28.	Both outer and inner garments may be stolen in this manner.	
29.	This technique takes great skill and practice.	

REQUIREMENT. Exercises 30 through 34 are true-false. Indicate your answer on the answer form by using A for TRUE and B for FALSE.

30. Amateur shoplifters are usually from lower economic groups.

31. Alert store personnel can frequently deter shoplifting by questioning strangers.

32. The outward appearance of an honest customer cannot be achieved by a professional thief.

33. Losses from employee pilferage exceed the combined total of losses from all other types of crime.

34. Salesmen and vendor representatives should be subject to the same policies and restrictions as the regular store employees.

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EXAM 387

Correspondence Subcourse Examination:

COMMISSARY STORE MANAGEMENT

This copy is a reprint which includes changes and corrections to the original edition.

U.S. ARMY QUARTERMASTER SCHOOL
FORT LEE, VIRGINIA

SUPPLY TRAINING CENTER OF THE ARMY SCHOOL SYSTEM

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EXAM 387 Credit Hours: 1

EXAMINATION ASSIGNMENT

SUBJECT	Commissary Store Management.
STUDY ASSIGNMENT	Review all previous assignments.
SCOPE	Management of the operations of the commissary store grocery market, meat market, and produce market, including merchandise selection, store layout and space allocation, improvement projects, and deterrents of shoplifting and pilferage.
OBJECTIVES	To test attainment of lesson objectives and to emphasize points that have previously been studied.

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EXAMINATION EXERCISES

REQUIREMENT. Exercises 1 through 25 are multiple choice. Each exercise has one single-best answer. Indicate your answer on your answer form.

1. The minimum training period for new commissary store employees is

   a. 5 days.

   b. 1 week.

   c. 2 weeks.

   d. 1 month.

2. The proper location of fixtures and equipment is an important factor in planning an efficient store layout. In which section of the commissary store should display cases for frozen foods be located?

   a. Meat market.

   b. Perishable groceries.

   c. Produce market.

   d. Nonperishable groceries.

3. Which of the following has the overall responsibility for item selection in the commissary store?

   a. Commissary officer.

   b. Requirements specialist.

   c. Item selection board.

   d. Commissary store manager.

4. The number of brand-name items selected for stockage in the commissary store should be

   a. the maximum number authorized.

   b. the minimum number necessary to satisfy patron demand.

   c. items required to meet individual demands.

   d. the number recommended in Army regulations.

5. Who must approve requests for establishing a group shopping service?

   a. The major commander.

   b. The commissary officer.

   c. The installation commander.

   d. The U.S. Army Troop Support Agency.

6. Shelf-stocking by a vendor is authorized for a specific list of products in Army commissary stores which are located

   a. overseas.

   b. in CONUS.

   c. in CONUS and Alaska.

   d. in the United States and Okinawa.

7. Change funds for use in the commissary store checkout operations are requested from the

   a. commissary officer.

   b. finance and accounting officer.

   c. store manager.

   d. chief cashier.

8. Freezing temperatures over long periods of time can damage nonperishable canned food items in storage by

   a. softening the product.

   b. encouraging bacterial growth.

   c. causing mold growth.

   d. encouraging insect infestation.

9. Standard prices established by DPSC are used for all

   a. locally purchased items.

   b. brand-name items.

   c. specification items.

   d. DPSC contracted items.

10. Which of the following frozen food categories accounts for the greatest percentage of frozen food sales?

   a. Frozen juices.

   b. Vegetables.

   c. Meat dinners.

   d. Frozen fish.

11. What type of meat market operation is authorized for class 2 commissary stores?

   a. One-hundred-percent patron self-service.

   b. Combination clerk-service and patron self-service.

   c. One-hundred-percent clerk-service.

   d. Patron self-service, clerk pricing.

12. The layout of the meat market processing area should be arranged to

    a. simplify merchandise selection and customer traffic.

    b. discourage back and forth shopping and eliminate bottlenecks.

    c. provide an allotted space for each type of merchandise.

    d. permit a straight-line workflow from right to left in order to avoid backtracking.

13. Under what circumstances may the commissary officer transfer preferred meat items from issue stocks to the meat market?

    a. Only in an emergency.

    b. When patron demand warrants such a transfer.

    c. When the transfer will not reduce the quality of issue stocks.

    d. When the quality of sales stock is below that of issue stocks.

14. Which of the following retail cuts is processed from the beef forequarter?

    a. Chuck steak.

    b. Flank steak.

    c. Porterhouse steak.

    d. Club steak.

15. There are four classes of liver suitable for commissary store meat market procurement. Beef liver is classified as

    a. class A.

    b. class B.

    c. class C.

    d. class D.

16. A produce market in which the patron selects from displays of preweighed and prepriced items is referred to as

    a. one-hundred-percent prepackaged self-service.

    b. combination clerk service and patron self-service.

    c. one-hundred-percent patron self-service.

    d. patron self-service, clerk pricing.

17. A primary advantage of the patron self-service, clerk pricing produce market is that

    a. congestion in the produce sales area is reduced.

    b. damage to displays is decreased by reducing excessive handling.

    c. shrinkage and spoilage are reduced.

    d. more personal attention can be given to displays.

18. The produce market is usually located

    a. across the rear of the store.

    b. in the center at the front of store.

    c. near the front entrance along the front or side of the store.

    d. along the side near the back of the store.

19. An important factor to consider in ordering produce is

    a. value.

    b. method of display.

    c. humidity.

    d. respiration.

20. The relative humidity in the produce chillroom should be approximately

    a. 95 percent.

    b. 90 percent.

    c. 80 percent.

    d. 75 percent.

21. Teenagers account for approximately what percentage of all shoplifters?

    a. 10 percent.

    b. 15 percent.

    c. 20 percent.

    d. 50 percent.

22. Which of the following shoplifting techniques is practiced primarily by professionals?

    a. Bold walk-out.

    b. Restroom tactic.

    c. Crotch carrying.

    d. Shopping bag.

23. When an employee sees a customer shopping with an open purse or otherwise looking suspicious, he should

    a. notify the store manager.

    b. follow the customer.

    c. try to remember the customer's face.

    d. question the customer's intentions.

24. Employees sometimes attempt to cover up theft of merchandise by

    a. blaming other employees.

    b. changing prices on remaining items to compensate for loss.

    c. padding inventories.

    d. hiding merchandise in garbage can.

25. Route salesmen may pilfer merchandise from stock and conceal it in

    a. garbage cans outside of store.

    b. empty containers which are returned to their truck.

    c. a locker until convenient to take it out.

    d. a booster box and walk out with it.

REQUIREMENT. Exercises 26 through 35 are matching exercises. Column I is a list of duties performed by commissary store personnel. Column II lists key personnel required for commissary store operations. Select the person in column II who is responsible for each duty listed in column I, and indicate your answer on the answer form. The choices in column II may be used once, more than once, or not at all.

Column I	Column II
26. Prepares requisitions and purchase instruments.	a. Store manager.
27. Takes necessary action to insure continuity of supply.	b. Cashier.
28. Insures replenishment of supplies from storage in sufficient quantities to meet patron demand.	c. Sales store worker.
29. Verifies the accuracy of prices.	d. Chief cashier.
30. Supervises the receipt, storage, and transfer of supplies from the backup storage to the sales area.	e. Supply specialist.
31. Tabulates total cash receipts for daily operations.	
32. Receives payment for all cash purchases made in the commissary store.	
33. Verifies prices as required, bags groceries, and performs other duties as assigned.	

Column I	Column II
34. Insures that shelves are adequately stocked at all times, that stock is arranged by commodity group, and that prices are prominently displayed.	
35. Verifies prices of stock as it is shelved and changes prices as necessary.	

REQUIREMENT. Exercises 36 through 42 are matching exercises. Column I is a listing of retail cuts of carcass beef. Column II is a listing of primal cuts. Select the primal cut in column II from which each of the retail cuts listed in column I is produced. The choices in column II may be used once, more than once, or not at all.

Column I	Column II
36. Sirloin steaks.	a. Loin.
37. Porterhouse steaks.	b. Rump.
38. T-bone steaks.	c. Round.
39. Swiss steaks.	d. Rib.
40. Delmonico steak.	e. Chuck.
41. Blade bone pot roast.	
42. Arm roast.	

REQUIREMENT. Exercises 43 through 50 are true-false. Indicate your answer on the answer form by using A for TRUE and B for FALSE.

43. Civilians should be used to the maximum extent possible in all retail activities of the commissary store.

44. The sales volume of the meat market equals approximately 11 percent of the total sales of the store.

45. Grocery items are usually price-marked before they are moved to the sales area.

46. The produce market is usually located near the front entrance of the store.

47. Perishable items such as lettuce, tomatoes, and celery should be ordered so that they will be received in the store early in the week to allow sufficient time for processing.

48. Green bananas ripen best at temperatures of 56° to 60° F. in a relative humidity of 65 to 75 percent.

49. Amateurs account for over 50 percent of all shoplifters.

50. In many stores; losses through employee pilferage exceed losses to shoplifters.

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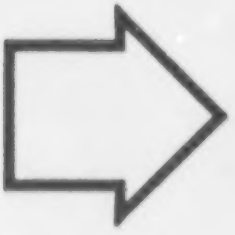
NIPUB 112



YOU ARE GOING TO GRADE YOUR OWN LESSONS ! ! !

The Quartermaster School has converted this subcourse's lessons so that you can evaluate yourself. YOU will check your own lesson exercises; thus, you DO NOT need lesson answer forms. The ONLY form you need to record your answers is a machine-process examination answer form. Check this form now to be sure the subcourse number on it is the same as the Quartermaster School number for this subcourse.

In addition to the usual materials, your subcourse packet includes an examination. After you complete the lesson exercises, you will take the examination. Follow these simple instructions:

a. Study the reading assignment for each lesson.

b. After thorough study, complete the lesson exercises by marking your answers in the exercise booklet itself.

c. Check yourself by verifying your answers against the lesson text. If one of your answers is wrong, study the appropriate text portion again.

d. Take the examination only after you have completed all the lessons to your satisfaction. Remember, your answers must be based on the study assignments, not on personal experience or information from other sources. Further instructions are in the examination booklet. Be sure to read them.

e. Check your answers before entering them on your answer form. We suggest you complete all examination exercises. An educated guess is better than an omission.

f. Return the examination answer form to the Quartermaster School. Use the addressed envelope provided.

YOU WILL RECEIVE CREDIT FOR THE TOTAL HOURS OF THIS SUBCOURSE UPON SUCCESSFUL COMPLETION OF THE EXAMINATION.

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JUNE 1975

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